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PAUL C. SCULLIN

Scullin Retires after 36 Years Service with The Texas Co.

NATIONAL PETROLEUM NEWS

JULY 26, 1939

Ready for work
ON ANY PUMP

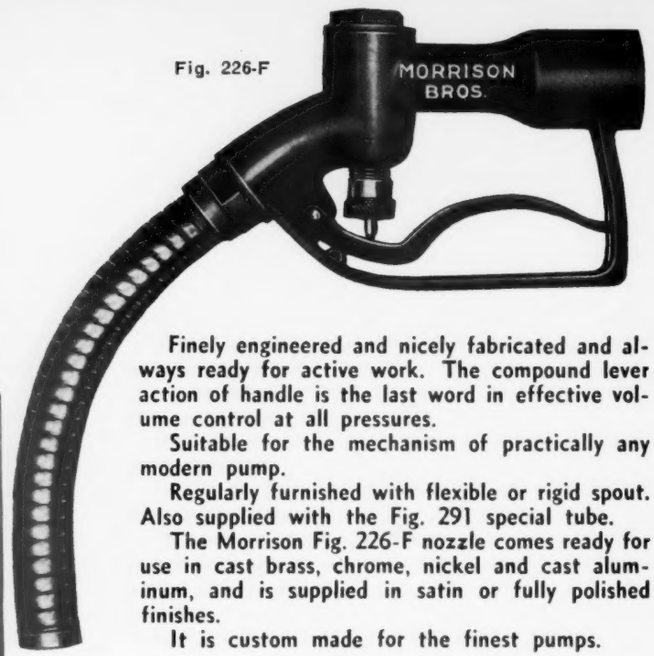

Fig. 226-F

Finely engineered and nicely fabricated and always ready for active work. The compound lever action of handle is the last word in effective volume control at all pressures.

Suitable for the mechanism of practically any modern pump.

Regularly furnished with flexible or rigid spout. Also supplied with the Fig. 291 special tube.

The Morrison Fig. 226-F nozzle comes ready for use in cast brass, chrome, nickel and cast aluminum, and is supplied in satin or fully polished finishes.

It is custom made for the finest pumps.

Fig 291

LASTING FLEXIBILITY

This finely armored synthetic rubber spout is the latest development in permanently tight flexible tubes. It is furnished in bright brass or lustrous nickel silver finish. First to design and manufacture a self-closing set hose nozzle, Morrison Bros. Co. now makes over 100 styles and sizes. This is all to your better service.

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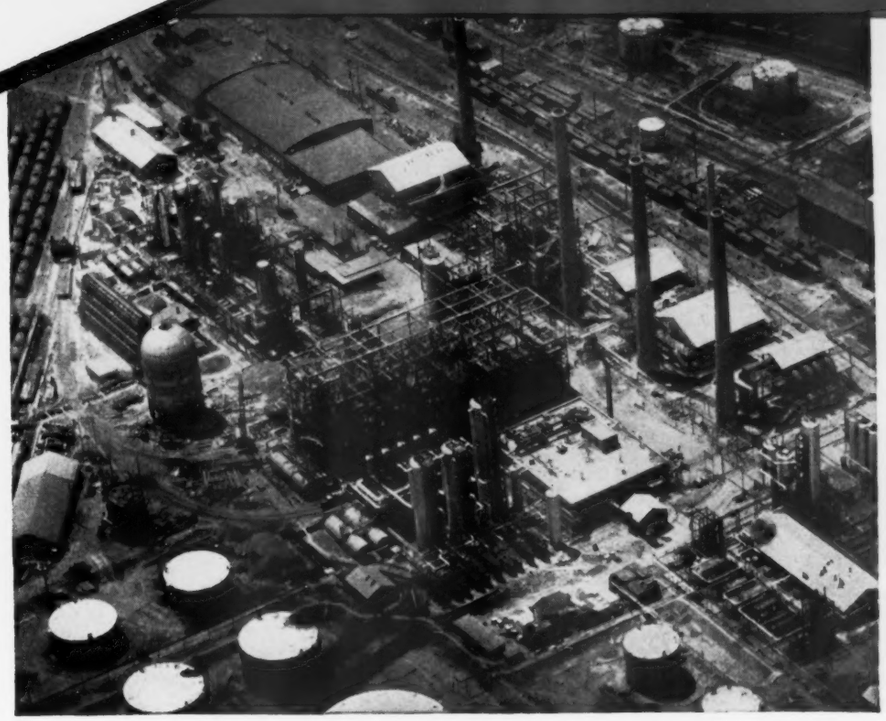
OIL EQUIPMENT HEADQUARTERS

DUBUQUE, IOWA

Houdry

UNDER CONSTRUCTION
AT TOLEDO, OHIO



The Houdry Unit at Toledo has a crude oil charging capacity of 28,000 Barrels per day and will catalytically crack 19,000 Barrels per day. The Unit will produce catalytically treated, high octane motor fuel.

There are 15 Houdry Units under design and construction, or in operation. Their combined catalytic cracking capacity is 150,000 Barrels per day.

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Engineers and Contractors
for Petroleum Distillation and Refinery Equipment

George W. Holland

Congress has just extended the Connally "Hot" Oil Law for another three years—and that scarcely made a splash in the newspapers. But it was headline news several years ago, when the Connally Law dammed up the "hot" oil output in East Texas, which had been demoralizing tank car markets throughout the U. S.

Today, the dam still holds, but the "hot" oil law's machinery functions quietly. At the helm, is George W. Holland, director of the Petroleum Conservation Division of the Interior Department under Secretary Ickes.

Mr. Holland is a government career man, with more than 30 years in civil service. Born in Minneapolis, he spent his early years in Oklahoma and then came with his father to Washington in 1898. His contacts with the oil industry date back nearly a quarter century.

Shortly after receiving his law degree from Georgetown University in 1908, he entered the Interior Department's General Land Office, transferring to the Geological Survey in 1917. During NRA days he was assigned to work with the Central Committee of California producers. Returning to Washington after the NRA, he became last chairman of the Petroleum Administrative Board which had administered the oil code.

When Secretary Ickes converted the PAB into the Petroleum Conservation Division on April 1, 1936, with the Connally Law as its chief work, Mr. Holland was named director. The associate directors are Dr. John W. Frey and E. B. Swanson, both also long time government career men.

National Petroleum News

VOLUM 31 WEDNESDAY JULY 26, 1939 NUMBER 30

FDR Suggests New Oil Legislation to Congress

Cole Oil Committee to Study Bill Reporting to Congress in January

N. P. N. News Bureau

WASHINGTON, July 24.—Federal oil control is again in the spotlight at Washington.

President Roosevelt is expected this week to send a letter to Chairman Cole of the congressional oil subcommittee outlining proposed legislation for "conservation of petroleum and prevention of waste."

Disclosure that the President would take such action followed a conference July 20 at the White House, attended by Interior Secretary Ickes, Director George W. Holland of the department's Petroleum Conservation Division, Rep. Lea (Calif.), chairman of the House Interstate Commerce Committee and Rep. Cole (Md.), chairman of the oil subcommittee of the Lea committee.

It is not expected that the President will seek enactment of oil legislation at this session. Rather, he will ask the Cole oil committee to study the matter and report to Congress when it meets in January.

While no inkling could be obtained as to type of legislation which the President will propose, observers here were today re-examining recommendations early this year of the National Resources Committee regarding oil and gas conservation (See, N.P.N., Feb. 22, 1939).

The resources committee, of which Secretary Ickes is chairman, in its report discussed somewhat vaguely "minimum standards for production and transportation of oil and gas" and the "need" for a federal agency being empowered to require that oil and gas be produced without waste. Coupled with this was the statement that such conservation measures should be "built on the foundation of state and federal co-operation." The report goes on to state "constitutional grounds" for federal regulation of production.

Combining these ideas, has suggested to some observers that the proposed legislation might provide some sort of "standards" for production and that a federal regulatory agency would step in if the states failed to meet these "standards." Oil production not produced in compliance with such "standards" would be barred from interstate commerce.

Thus, the club of federal oil control could be used to "persuade" the oil-producing state to enact and enforce oil and conservation laws which federal authorities deemed "adequate."

The following definite recommendation was made by the National Resources Committee early this year:

"We propose that a federal oil conservation board or commission should be created within the appropriate government department to administer the federal interest in the oil and gas industry and to make necessary rules and regulations concerning the production of and commerce in oil and gas. It should have the authority to require that oil and gas be extracted by such methods as are adequate to avoid waste and to protect the interest of all producers drawing from a common reservoir."

If the National Resources Committee's recommendations are carried out *in toto*, however, the oil industry would be given an opportunity to be heard as to the type of regulations adopted. The resources committee said:

"It is recognized that the de-

Probe Involves Louisiana Oil

By Telegraph

NEW ORLEANS, La., July 25.—That part of Louisiana's muddled political affairs pertaining to the regulation of the oil industry in the state have taken several unexpected bounces here.

Conservation Commissioner William K. Rankin, who had repeatedly opposed efforts to get records of his department "opened to the public", handed in his resignation to the new governor, Earl K. Long. About the same time the governor ordered Dr. J. A. Shaw, who had been ousted on instructions of Long three weeks ago reinstated as head of the Minerals Division of the Department.

Shortly after Rankin resigned Attorney General David N. Ellison ruled that the conservation department's books should be opened to the public. His ruling was made following request for an opinion when a committee of New Orleans business men asked to see the records after Rankin announced he would turn over to the Louisiana State University a check for $91,000 as the unspent balance of a $450,000 legislative propriation for constructing and maintaining a new geology building at the university.

One of the "pertinent questions" the Times-Picayune had asked in its Monday morning edition was "why has it taken Attorney General Ellison so long to render a decision as to whether tax payers are entitled to see the books of the conservation commission?"

Meanwhile, the federal grand jury investigating the scandals that have broken in the state are understood to be interested in the conservation department's records. One report was that the U. S. marshal already had been instructed to take possession of the entire set of records.

Two more federal investigators have arrived, meanwhile, to assist in the "hot" oil probe ordered last week by Interior Secretary Ickes. Jack Steele, chairman of the Federal Tender Board No. 1 in the East Texas field also has arrived in New Orleans to establish another tender board in Louisiana.

The federal investigators are

(*Continued on page* 21)

Marketers in Many States Praise 'Hi Neighbor' Plan

N. P. N. News Bureau

CLEVELAND, July 24.—Plan of Oklahoma City oil marketers to seek the public's aid in ending price wars, as described in last week's NATIONAL PETROLEUM NEWS, struck a responsive chord among jobbers and dealers throughout the U. S.

More than a hundred Oklahoma City jobbers and dealers are participating in the plan which aims to educate the public generally on the disastrous effects of cut-prices not only on station operators but the entire community.

Through a non-profit organization, Neighbors, Inc., formed by the Oklahoma City marketers, has campaigned for public support for fair prices, pledging in return that the participating stations would give "friendly service and quality merchandise," treating all customers alike—that is, no discounting off their posted prices.

So impressed by the NPN articles was J. H. Parker, New Bern, N. C., of Coastal Oil Co., that he intends to bring them to the attention of North Carolina Oil Jobbers Ass'n. at its meeting August 5 at Wrightsville Beach, N. C. Mr. Parker is president of the association.

Jobber association officials in other states also had high praise for the Oklahoma City plan, pointing out that there was no reason why its basic principles could not be used successfully in other areas.

One pointed out that the Oklahoma City jobbers and dealers were capitalizing on an asset "commonly neglected" by marketers—that is the "localizing their business."

Praising the "Hi Neighbor" movement, another said "there are too few oil men in the marketing branch who have enough intestinal fortitude to post a price and stick to it."

Wilmer R. Schuh, Milwaukee, president of the National Ass'n. of Petroleum Retailers, said the plan embodied the fundamentals of sound marketing—service to the public, truthful prices (selling only at posted prices with

(*Continued on page* 19)

velopment of minimum standards for the production and transportation of oil and gas designed to further the national interest in conservation of these resources is a complex problem, and that such standards should be developed in co-operation with the state regulatory agencies and the representatives of the industry. It is recommended, therefore, that the Connally Act be extended for such time as may be necessary for the framing and enactment of an adequate federal oil and gas measure."

Again, if the committee's recommendations are followed, the proposal for federal regulation will be based on a plan of federal-state co-operation. Discussing this phase, the report said:

Federal-State Co-operation?

"Considerable advance in conservation laws, regulation and enforcement has been made in several states during recent years, and federal legislation in the form of the Connally Act has supplemented such state activity. Work already accomplished has the advantage of having been tested legally, and a substantial recognition of the validity of these conservation efforts has been accorded. The gains so far accomplished by some of the states and the federal government should not be lost, and future legislation should be built upon this foundation of state and federal co-operation. . . . The recognition of the mutual interests of the states and the federal government—each in its special field of activity—must serve as the basis for the enactment of more comprehensive legislation on oil and gas."

It is possible, also, that the proposed legislation will set up a national policy with regard to exports and imports of petroleum and products, a subject which was touched on by the committee report thus: "Regulation under federal auspices should be co-ordinated with a national policy concerning exports and imports of petroleum and undertaken with the aim of conserving the nation's resources."

Some revision of the "mischievous law of capture" (to quote the committee report) may also be expected in the attempted measure. The committee declared that "erroneous analogies" had been used as a basis for establishing the law of capture and the "ruling that oil and gas belong to the owner of the well from which it is taken, regardless of whether or not it had migrated from a neighbor's land."

The resources committee also recommended the federal government take over oil-bearing tidelands—a proposal backed by the Navy Department.

Pre-NRA Days Are Relived

Memories of pre NRA and immediately-post-NRA days were rudely awakened when the purpose of last week's White House conference became known, and, unless observers here are mistaken as to the content of the bill to be "suggested" by the President, it will fit into the picture as neatly as if cut to order.

The New Deal was hardly a month old before a conference of oil state governors recommended that the President appoint a "czar" for the industry, close all flush pools, and prohibit interstate shipment of "hot" oil. At the same time the governors' representatives asked that the oil producing states enact conservation statutes. (There had been studies of the oil industry by interdepartmental boards during the Coolidge and Hoover administrations, but nothing ever came of them in a legislative way.)

While President Roosevelt did not go quite so far as the governors' conference had recommended, he embraced the "hot" oil proposal, and bills introduced by Sen. Capper (Kans.) and Rep. Marland (later governor of Oklahoma) included a prohibition against interstate shipment of "hot" oil, among other regulatory proposals, including authority for the Interior Secretary to establish marketing and production quotas, regulate imports and exports, and study pipeline ownership by oil companies.

It was while all this agitation was still going on that the Recovery Act (NIRA) was passed, whose Section 9-C outlawed interstate shipment of "hot" oil. While the NRA oil code was still in effect, Sen. Thomas and Rep. Disney, both of Oklahoma, sponsored a bill, early in 1934, which would have given Interior Department authority to determine demand and regulate production, establish quotas, and similarly regulate the production branch of industry.

This bill was killed by the House Interstate Commerce Committee, which, at the same

(*Continued on page* 11)

BULLETINS

FDR Sends Federal Oil Bill to Congress

WASHINGTON — The letter from President Roosevelt, along with the "suggested" federal oil conservation bill have been received in the offices of Representatives Cole, Md., Lea, Calif., and Rayburn, Tex., but their contents will not be released until Mr. Cole returns from his home at Towson, Md., where he is confined with bronchitis. It may be Thursday or Friday before there will be any release, it was indicated.

* * *

Illinois Output Nears 300,000-Barrel Mark

NEW YORK, July 25. — Crude oil production in southern Illinois averaged 283,150 barrels daily in the week ended July 22, up 19,200 barrels from the previous week, according to report of the American Petroleum Institute today. U. S. production averaged 3,583,000 barrels daily, up 54,005 barrels—highest since week ended May 27 when it was 3,585,250 barrels.

* * *

Takings of Illinois Crude Increased by Majors

CHICAGO, Ill.—Standard Oil Co. of Indiana is now purchasing about 12,000 barrels of crude daily from southern Illinois, according to a company announcement here today. The Indiana Standard company began taking approximately 5000 barrels daily from the Oklahoma Pipe Line Co. last spring. The crude is being moved to the company's Wood River, Illinois refinery.

Meanwhile, Standard of New Jersey is reported taking 5000 barrels daily of Illinois crude for shipment via pipeline to its Bayonne, N. J., refinery.

* * *

Oil Truckers Plan Fight on CFA Rate Cuts

CLEVELAND — Petroleum truck transporters operating in Central Freight Ass'n territory are reported planning to ask the Interstate Commerce Commission to suspend the railroad freight cuts scheduled to become effective Aug. 20. A tariff (ICC No. 3322), embodying the rate reductions, was filed July 19 with the ICC. Reductions are said to amount to approximately 33 per cent for distances up to 130 miles, and are "considerably below" truck rates in many instances.

* * *

'Equalizing' Rate Cuts from Mid-Continent Asked

TULSA — An emergency proposal calling for an approximate 33 per cent cut in petroleum rail rates from the Mid-Continent to destinations in the Central Freight Association territory has been filed with Southwestern Freight Bureau by the Petroleum Rail Shippers Association. The proposal is expected to be published and docketed some time this week.

Proposed rates would use as base the 33 per cent cut in CFA territory petroleum rail rates effective Aug. 20. Provision is made, however, that so-called Group 3 rates shall not exceed those in effect Feb. 29, 1916.

Proposal affects destination points in all parts of Illinois, Indiana, Ohio, Michigan, West Virginia, Pennsylvania and New York.

Rail rates from Tulsa (Group 3) to Indianapolis would be reduced approximately 16 cents per cwt. (1.05 cents a gallon gasoline), from 48 cents per cwt. (3.16 cents a gallon) to 32 cents per cwt. (2.11 cents a gallon on gasoline) under provisions of the proposal.

* * *

Indiana Standard Subsidiary Plans 480-Mile Line

WASHINGTON — Construction of a 480-mile pipeline from Salt Creek and other Wyoming fields to Salt Lake City, Utah, is proposed in a registration statement filed by Utah Oil Refining Co., with Securities Exchange Commission, covering 150,000 shares of $5 par value common stock which will be offered for subscription by shareholders, on a pro rata basis in accordance with their present holdings, at $7 a share. Statement says that Standard Oil Co. (Indiana), parent of the Utah company, is committed to take 112,750 shares.

Net proceeds from the sale of the stock (estimated at $1,040,000) will be applied toward construction of the Wyoming-Utah pipeline. Total cost is estimated at $4,500,000.

Federal Oil Control Bill

'Suggested' by White House

(*Continued from page* 10)

time, set up the Cole sub-committee and provided for its sweeping investigation of the oil industry. The Cole oil investigation started in Sept. 1934, and a preliminary report was issued in Jan. 1935, but no recommendations for federal control were contained therein, the committee deeming that state efforts then under way to regulate the industry should be given a chance first, and also, the committee preferred to wait until after the decision of the Panama and Amazon cases, then in Supreme Court, testing constitutionality of Section 9-C.

With the decision in these cases, the federal government's power to regulate interstate shipments of "hot" oil temporarily terminated— until passage of the Connally "Hot" Oil Law, still on the books and the only federal "regulatory" measure in effect as far as oil is concerned, (if, indeed, it can be called "regulatory").

Shortly after the Panama-Amazon decision, Interior Secretary Ickes, always an advocate of federal oil control, became more vocal in his demands, but the only legislation passed was the Connally Law.

In August of 1935, Rep. Cole introduced his bill to give Congressional consent to the interstate oil compact (entered into the previous February), and to establish the Petroleum Administrative board, giving it authority to administer the Connally Law.

Things went along relatively quietly then, for a while, under the compact and the Connally Act, the forecasts of demand by the Bureau of Mines, state conservation statutes, and periodic reports from the Interior Department on various phases of the industry. Each few months, however, Secretary Ickes found an occasion to tell the world in general that there ought to be federal control of the oil industry.

Then, early in 1938, two Pennsylvania representatives, seeking a discriminatory tax on fuel oil, called at the White House and told how coal was being replaced by oil, and how the former was plentiful and the latter scarce.

Not long afterward the President wrote a letter to Sec. Ickes, as chairman of the National Resources Committee, directing the "energy survey" on which a report was made early this year, and which is regarded as the basis for this new move for federal oil control. That, in brief, is the picture.

Coal States Support Federal Oil Control

N. P. N. News Bureau

WASHINGTON, July 24. — The coal industry—particularly the anthracite end of it—continues to rear its sooty head to shout for federal oil control, and for more federal money to conduct experiments aimed at more uses for its products.

Regardless of what President Roosevelt "suggests" regarding federal legislation to regulate the oil industry, it may be expected that if it has even the indirect effect of giving the coal industry an "edge" the coal people will get in behind it.

Latest of several bills to appropriate federal money for experimentation with anthracite is that of Rep. Moser, Pa., which would provide $54,500 for the Bureau of Mines to "conduct research and experiments into new and extended chemical and other uses for coal . . ."

Rep. Van Zandt, also of Pennsylvania, inserted a lengthy speech in the Record (under privilege of extension of remarks), supporting the anthracite experimentation subsidy bill, in which he declared:

"Greater efficiencies, however, have been effected in using coal than in the use of fuel oil and natural gas. Since more labor is required in the mining and producing of coal than for the production of the other two fuels, the direct effect (of increasing oil use) has been unemployment of many men. Of course, no one would contend that advances in technology which increase efficiency are undesirable. Increased efficiency of utilization makes for conservation, and at the same time enables us to have a full share of our natural resources. These resources are not replaceable, hence conservation and efficiency of utilization are of paramount importance. Nevertheless, the immediate result is a diminished demand for labor which has already resulted in many disturbing social and economic consequences in some communities, such as Clearfield County in my district."

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NPN's Log ON OIL LEGISLATION

Summarized oil legislative information below is based on reports received at Cleveland from Washington and state legislatures, which are deemed reliable although NATIONAL PETROLEUM NEWS assumes no responsibility for accuracy or completeness of this information.

Final Reports

Connecticut

(Legislature convened Jan. 4, adjourned June 7.)

Bills Enacted

HB-993. Provides that any person who shall buy any fuel and shall use the same for purposes other than in the propelling of motor vehicles using combustible type engines over the highways (instead of "over the highways of this state" as in the present law) shall be entitled to a refund of the tax paid on such fuel.

HB-1394. Provides that every retail dealer shall post at each pump a sign showing the price per gallon of motor fuel and in separate figures the state tax and the federal tax and the total cost. Approved June 9, 1939.

HB-146. Authorizes the Highway Commissioner to build footpaths, where the public safety requires, along any state-aid or trunk highway. Approved June 10, 1939.

HB-281. Provides fees for an operator's license. Approved June 19, 1939.

HB-1542. Provides for the construction of the "Wilbur Cross Highway" to be financed by toll collections on the highway. Merritt Parkway Tolls are also authorized. Approved June 16, 1939.

HB-1658. Provides that the Commissioner of Motor Vehicles shall not issue registration to any applicant if the local property tax on the vehicle has not been paid. Approved June 19, 1939.

SB-800. Provides that any person desiring to obtain a license for the sale of gasoline shall just obtain a certificate of approval of the location from the proper local authority. Approved March 23, 1939.

SB-851. Unfair Sales Practices. Prohibits advertising, selling, or offering to sell at less than cost by retailers or wholesalers with intent to induce the purchase of other merchandise or to unfairly divert trade from a competitor or to injure competitors or destroy competition. Approved June 29, 1939.

Bills Which Did Not Pass

HB-787. To reduce the gasoline tax from 3 cents to 2 cents per gallon.

HB-1257. To reduce the gasoline tax from 3 cents to 1½ cents per gallon.

HB-795. To increase allowance for collection and shrinkage from 1 per cent to 3 per cent.

HB-997. To increase allowance for collection and shrinkage from 1 per cent to 2 per cent.

HB-1244. To exempt from the tax fuels sold to any town, city or borough located in the State.

HB-1006. To provide that any unrefunded balance of taxes received on aviation gasoline shall be transferred to Department of Aeronautics account by State Treasurer.

HB-574. To prohibit sale of any motor fuel which has been adulterated or otherwise added to so that it shall contain any product upon which the motor fuel tax is not applicable and which increases the quantity of the motor fuel the whole of which would otherwise be subject to such tax.

HB-1369. To prohibit the sale of gasoline which has been adulterated or diluted by adding thereto any kerosine or other liquid.

HB-25. To enact a constitutional amendment prohibiting the diversion of highway funds.

HB-100. To regulate outdoor advertising.

HB-876. To license persons engaged in the business of selling, trading, receiving, installing or repairing condemned, rebuilt, new or used weighing or measuring devices.

HB-1328. To provide that no contract shall be decreed invalid for containing a price maintenance clause.

HB-1395. To create a state labor relations board.

HB-144. To provide that vehicles using the highways shall not carry more than one full tank which shall not exceed 35 gallons in size.

HB-932. To repeal law regulating trucking under the Public Utilities Commission.

HB-1475. To provide that the gross weight of commercial vehicles be increased to 35,000 pounds.

HB-991. To prohibit the sale or storage of any motor lubricating oils, or greases in any store or place of business where vegetables, meats or other foodstuffs are stored or sold.

HB-1474. To provide that licenses for the sale of gasoline shall expire on March 31st of each year.

SB-219. To repeal 1 per cent allowance for collection and shrinkage.

SB-717. To provide that any town, city or borough located in the State shall be entitled to a refund of gasoline tax.

SB-697. To provide that only two-thirds, instead of all, of money received from the gasoline tax shall be expended under direction of the highway commissioner for highways.

SB-482. To require a license for each chain store operated in the state. Fee $50. No exemption for stations or bulk plants.

SB-442. To repeal that part of Fair Trade Act which defines terms and permits contracts specifying resale prices.

SB-463. To make unlawful every contract, combination or conspiracy in restraint of trade or commerce or to fix wholesale or retail price of necessities of life, so that price would be greater or less than would otherwise prevail, or to limit or restrain production, manufacture, shipment or sale of any commodity for purpose of price regulation.

SB-510. To prohibit wholesalers from selling at less than cost with intent to injure competitors or destroy competition.

SB-17 and 33. To establish minimum wages and maximum hours.

SB-910. To create in the Department of Labor and Factory Inspection a Wages and Hours Division to fix minimum wage and maximum hour standards.

SB-287. To increase the maximum allowable gross weight for a single four-wheeled vehicle from 32,000 to 36,000 pounds.

SB-259. To provide that the Commissioner of State Police shall prepare and enforce reasonable regulations for the storage and transportation of inflammable liquids.

Florida

(Legislature convened April 4, adjourned, June 2)

Bills Passed

HB-266 and SB-78. Continues the 1 cent additional tax on sales of gasoline to June 30, 1941. Provides that no municipality or other political subdivision shall levy or collect any gasoline tax. One-half of the revenues are to be credited to the General Fund and one-half to the County School Fund. Approved June 12, 1939.

HB-1969. Imposes upon all distillate and motor fuel, other than gasoline, used by motor vehicles upon the highways for transportation a tax of 7 cents per gallon. The revenue is to be paid into the General Fund. Law without approval.

HB-1229. Provides that not more than one-half of moneys derived from gasoline taxes and credited to Broward County shall be paid to the county each month, which money shall be used for any county purpose. Approved May 26, 1939.

HB-1338. Empowers any county having a population of not less than 13,300 and not more than 13,360 to regulate, restrict or prohibit the erection or maintenance of any sign within 200 feet on either side of any public highway in such county if it is believed that such sign would constitute a menace and a danger to the safety of the traveling public. Approved May 30, 1939.

HB-624. Rewrites Fair Trade Act so as to make established resale prices legally binding on non-contracting dealers. Approved May 30, 1939.

HJRes.-153 and SJRes.-69. Provides for a constitutional amendment prohibiting the ad valorem taxation of real or personal property except intangibles, for any State purposes. Law without approval.

HB-1632. To exempt City of Pensacola from provision of SB-78 (supra) prohibiting municipal gasoline taxation and authorizing city to impose a tax not exceeding 1 cent per gallon. Law without approval.

HB-1769. To exempt Panama City from provision of SB-78 (supra) prohibiting municipal gasoline taxation and authorizing a tax not exceeding 1 cent per gallon. Law without approval.

HB-1948. To exempt City of Marianna from provision of SB-78 (supra) prohibiting municipal gasoline taxation and authorizing a tax not exceeding 1 cent per gallon. Law without approval.

SB-1151. To exempt City of Port St. Joe from provision of SB-78 (supra) prohibiting municipal gasoline taxation and authorizing a tax not exceeding 1 cent per gallon. Law without approval.

SB-455. Authorizes State Board of Health to adopt a Sanitary Code regulating, among other matters, the pollution by sewage, industrial or other wastes, of streams, lakes, and other waters. Law without approval.

SB-959. Prohibits the erection, maintenance or operation of filling stations, public garages, or mercantile establishments on Lafayette Street in the City of Tampa between certain points. Law without approval.

Bills Which Did Not Pass

HB-221. To provide for refund of 3 cents on any motor fuel purchased for exclusive use in the operation of marine engines for the propelling of motor boats or other water craft.

HB-250. To provide for refund of 90 per cent of the tax paid on gasoline under Chapter 15659, Acts of 1931 (6 cents) when the gasoline is used in lots of 5 gallons or more in a motor boat used principally for fishing in Florida waters.

HB-440 and SB-223. To authorize each incorporated city, village, or town in the state to impose a tax of 2 cents per gallon for every gallon of gasoline or other like product of petroleum sold. The tax would not be in addition to the state taxes. The payer of the tax would receive credit therefor on his state gas tax.

HB-675. To segregate tax on gasoline sold for use by watercraft and to use funds for the development of the inland and coastal waterways of Florida.

HB-1099. To appropriate to the State Board of Conservation 3 cents of the gasoline tax paid on gasoline used in fishing boats.

HB-1904. To impose a tax of 7 cents per gallon on all motor vehicle fuel in excess of 20 gallons upon which other gasoline taxes now imposed by law in the state have not been paid that is carried into the state on or by any motor vehicle using the highways when such fuel is to be consumed in and by the said motor vehicle.

HB-25 and SB-43. To repeal provision of the chain store tax which levies a tax on gross receipts.

HB-297. To repeal the chain store tax law.

HB-346 and SB-44. To impose an annual license tax for the privilege of carrying on the business of a retailer based on the kind and number of stores included under the same general management, ownership, or control, whether located in state or not. Provides for taxation of independent stores, chain stores, department stores, and independent department stores. The term "store" would not include bulk plants or filling stations engaged exclusively in the sale of gasoline and other petroleum products.

HB-983. To increase the chain store tax rate from ½ per cent to 1½ per cent of gross receipts.

HB-1773. To increase the chain store tax rate from ½ per cent to 2 per cent of gross receipts.

HB-2038. To amend the chain store tax by increasing rate and by specifically including filling stations within the meaning of the term "store."

HB-1276. To provide that the State Road Department may set up highway protective areas, provide building setbacks and regulate advertising.

HB-178. Unfair Sales Act. To prohibit sales below cost by wholesalers and retailers.

HB-610 and SB-289. To prohibit any person engaged in the production, manufacture, distribution or sale of petroleum products with the intent to injure or destroy the business of a competitor from selling below cost or at different prices in different sections.

HB-624 and SB-287. To enact a Fair Trade Act.

HB-232. To provide for motor vehicle registration on October 1st.

HB-368. To limit the maximum allowable gross weight of single vehicles and vehicles with semi-trailers to 20,000 pounds.

HB-579. To increase the maximum allowable weight for single vehicles to 24,000 pounds and for combinations of vehicles to 40,000 pounds. To take advantage of this increase a $50 maintenance tag must be purchased.

HB-630. To amend law regulating motor vehicle carriers by reducing the mileage tax and providing for a 12 hour day for truck drivers.

HB-1154. To fix a maximum allowable weight of 40,000 pounds for "for-hire" carriers and to impose a maintenance tax of $100 for taking advantage of the increased weight.

HB-1570. To provide that no truck shall carry a net load of gasoline over 10,000 gallons.

HB-1819 and SB-1111. An act relating to and regulating the transportation, handling storing and distributing of propanes, protanes, ethanes, butanes, normal butanes, commercial butanes, isobutanes, Green's fuel, or any blends of the aforesaid liquids, or any other hydro-carbons and petroleum volatile liquids having a dew-point of 60° F. or below.

SB-109. To provide that taxes upon the sale of gasoline or other like product of petroleum for the use of or consumption by yachts, launches, tugboats, barges, speed-

boats, motorboats and watercraft of every kind shall be segregated and called the Boat Gas Tax.

SB-113. To provide for refund of 90 per cent of the tax paid on gasoline and allocated to the State Road Department (3 cents) when the gasoline is used in tractors for agricultural and/or horticultural purposes, in lots of 10 gallons or more; and when the gasoline is used in motor boats used principally for fishing in Florida waters, in lots of 5 gallons or more.

SB-205. To provide for refund of 3 cents per gallon on motor fuel used exclusively in the operation of marine engines for the propelling of motor boats or other watercraft.

SB-679. To impose a tax of 7 cents per gallon on the use of fuels, except gasoline, used in an internal combustion engine for the generation of power to propel motor vehicles on the public highways.

SB-856. To repeal the present inspection law and to enact a new one in its place. Would also create a Gasoline and Oil Inspection Board to adopt standards for various grades of gasoline.

SB-1165. To amend the chain store tax by changing the definition of the term "gross receipts," increasing the tax rate, and by specifically including filling stations in the term "store."

SJ Res.-1006. To enact a constitutional amendment prohibiting the diversion of highway funds.

SB-394. To prohibit "waste" in the production, storage, or transportation of crude petroleum oil or natural gas.

SB-474. To provide for a 10-hour day for truck drivers.

SB-662. To repeal mileage tax on "for-hire" trucks and to impose a maintenance tag fee of $50 for such trucks.

SB-1216, 1217 and 1219. Relate to county sharing of funds.

SB-196. To award a bonus of $50,000 to the first person to produce natural oil or gas in commercial quantities from a well situated in Florida.

Hearings Scheduled On Sign Ordinance For New York City

N. P. N. News Bureau

NEW YORK, July 24.—A hearing on the gasoline price posting ordinance, passed recently by the New York City Council will be held July 28 before Mayor LaGuardia.

Dealer proponents of the ordinance, which is simple price posting measure designed to outlaw the "bushel" type sign by limiting posting to price signs on the pumps, have no plans other than to give routine testimony at the hearing, according to Sol A. Herzog, counsel for Garage and Gasoline Station Operators' Council.

Earlier this year, Mayor LaGuardia vetoed a price posting bill sponsored by retailers.

"Chief objection of the mayor to the previous bill was that it verged on price fixing and was inflexible and severe", Mr. Herzog said. "The present bill", he added, "is simply drawn and makes allowances for special sales, such as to large consumers and to auto clubs. The only restriction being that such sales prices must also be posted, as well as ordinary prices".

South Carolina Price Suit Awaits Law's Validity Test

N. P. N. Staff Writer

FLORENCE, S. C., July 24.—Further action in the state's suit against five major oil companies, charging violation of the South Carolina price discrimination law in connection with commercial consumer accounts, awaits a ruling by Common Pleas Judge L. D. Lide, following arguments here last week on constitutionality of the state "discovery" statute as well as the inclusiveness of a discovery order issued by the court in connection with the suits.

In its complaints against the five companies (Standard Oil Co. of New Jersey, Gulf Oil Corp., Sinclair Refining Co., The Texas Co. and Shell Oil Co. Inc.), the state alleges several specific instances of sales to commercial consumers which, it says, violate the statute.

Under the discovery order, issued by the court, the state sought to have the companies produce their books and records on gasoline sales.

The complaints were accompanied by a motion to amend, on the basis of information as to other allegedly discriminatory sales, when the information to be obtained under the order under the "discovery" statute was in the hands of the state. That is, when the information sought by the discovery order was available, the state planned to enlarge upon the complaint to the extent of alleging further specific instances of "discriminatory" sales to commercial consumer accounts.

In last week's arguments, Standard of New Jersey asked that the discovery orders be modified as to it, contending that they should have been confined to the three alleged violations contained in the complaint. The complaint asserted that according to the "information and belief" of the plaintiff, "many other" similar violations in consumer sales had been committed.

The Texas and Gulf arguments contended, also, that the order of discovery was not only not justified by the discovery statute (passed as applicable to the state's monopoly statute), but that the statute was unconstitutional in that it denied equal protection of the law, violated the "due process" provision of the federal constitution, and, further, was violative of the South Carolina constitutional provision against unlawful search and seizure.

In rebuttal to these arguments, William H. White and Hubert E. Yarborough, Florence attorneys who are associated with S. C. Attorney General John Daniel in the case, contended that in an investigation of this type the attorney general has the same investigative powers as a grand jury, and can subpoena and require what information is necessary to the investigation.

Although the other two major companies similarly charged under the statute have not appeared in court, it is probable any further action in the five cases will await ruling by Judge Lide on the arguments of last week.

Pete Thornell, Florence independent jobber and retailer, is the only independent named in the case. The complaints list Mr. Thornell as being "among whom" such alleged price discrimination seeks to "injure or destroy," in the words of the statute. The complaints specifically charge that sales have been made to consumer accounts in Florence county at prices from 1.5 to 2.5 cents below the prices charged dealers. (Earlier stories in NPN July 19, p. 10, and July 5, p. 20).

Defendant's Answer Due in R-P Law Complaint

N. P. N. News Bureau

WASHINGTON, July 24.—Answers to the Federal Trade Commission's complaint charging American Oil Co. and General Finance, Inc., with violation of the Robinson-Patman price discrimination law in connection with sales to taxicab companies (N.P.N., July 12, p. 9), are due late this week, and hearings are scheduled for Aug. 11.

Charges in this case are similar to those contained in the suits which have been brought by the state of South Carolina against five major oil companies, although in the Amoco case the alleged violation is of the federal Robinson-Patman Act, and in the Florence, S. C., cases, violations of the state's price discrimination act are alleged.

Resale 'Gas' Prices Restored In New York City by Socony

N. P. N. News Bureau

NEW YORK, July 24.—Socony-Vacuum Oil Co. has re-established minimum resale prices for its branded gasoline in Kings and Queens counties (New York City) which it suspended June 30 and July 1.

New minimum prices, effective July 21, were 16.4 cents for regular and 18.4 cents for premium grade, according to a company announcement. These prices are 0.4-cent below the prices which were in effect when the company suspended resale price maintenance June 30 and July 1.

Effect of this reduction will be to lower by 0.4-cent the total spread of dealers who elect to sell at the minimum resale prices posted specified by Socony under the Feld-Crawford fair trade law. Tankwagon price to dealers was not changed, remaining 13 cents per gallon, including taxes, for regular grade.

In announcing the re-establishment of minimum resale prices, Socony explained that since prices were suspended "most of the dealers in these products are selling Mobilgas (regular) at 6 gallons for 98 cents, including tax. We feel that conditions justify our resumption of resale price maintenance."

Belief that the suspension of minimum resale prices was an "experiment" by the companies "to allow gasoline prices to seek a level in line with market conditions," was expressed by Sol A. Herzog, counsel for Garage and Gasoline Station Operators' Council of Greater New York. "Having determined this level," he added, "they have resumed price maintenance in line with results of the experiment."

The restoration, Mr. Herzog added "has had a salutary effect upon the dealers themselves since it gives them some assurance of stability in the market."

Prices Reduced in Manhattan

On July 24, Socony announced that effective July 25 it was reducing the resale price for its branded regular grade from 16.8 cents to 16.4 cents per gallon in New York City counties of Manhattan and Bronx. The company also announced a similar reduction in the resale price for premium grade.

"Unsettled price conditions are responsible for the reduction", a company official stated.

New prices posted in Manhattan and Bronx put them on the same level with Kings and Queens, and as in the latter two counties, the effect will be to lower the gross dealer margin by 0.4-cent for dealers who sell at the minimum posting.

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Summer Demand Breaks Record— But How About YOUR Price?

By WARREN C. PLATT, Editor

We are into summer and it is a good summer for the oil industry. Gasoline consumption is running well ahead of last year. For August the Bureau of Mines estimates the motorists will buy 5 per cent more than they did last year. There isn't another industry, hardly, dealing in a commodity, that has such a fine market demand crowded upon it.

Yet the oil industry is crying about prices. However, it is strongly suspected some oil men have found out how to make money by good management, adopting new ideas as to methods and modern equipment. From all the interest in modernization of marketing equipment by small companies as well as large ones, it is only fair to assume that some men are making profits and others know how they can make profits if they make their operations more efficient.

But, in addition to modern equipment and the most efficient methods of management, the oil industry needs to overhaul its price thinking. It should quit passing the "buck" to the "other fellow" and accepting his price or something below it. When each oil man realizes that HIS price is his individual responsibility and no one else's and when he starts doing some original thinking and acting in behalf of HIS OWN PRICE, then the industry's whole price structure will stand to improve.

It is a sin and a shame if the oil industry lets this record-breaking consumption of this summer pass without each man deciding to do something about making HIS PRICE reasonably profitable—if it isn't so now.

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Laws Cannot Substitute for Progressive Management

With the aid of beer and sandwiches and a free trip down the Potomac River, less than two handfulls of Congressmen and a crowd of chain store tax addicts with their mentor, Congressman Patman from Texas, planned more driving for chain store taxes.

These people believe it is easier to make a profit by legislation than by trying to figure out better management, better merchandise and better service to their customers. Generally at the heart of one of these "movements" you can find an individual or two who has a direct financial interest in continuing the "movement" otherwise he would be among the unemployed. Even Congressman Patman, it was disclosed in the McKesson & Robbins scandal got an "honorarium," or something of the kind, from the sleight-of-hand artist who ran the mysterious financial affairs for that company. Patman received this money to help him "travel" and make speeches against the "drug trust" or whatever the competitor of the manipulators of McKesson & Robbins was.

Evidence that the so-called "Iowa Plan" of operating service stations, has not helped either the oil industry, the dealers themselves or the public, is increasing. NATIONAL PETROLEUM NEWS has been doing quite a bit of investigating of late and fails to find any supporting evidence for the "plan." Most everywhere you look you find the plan isn't working out. No matter how modern and good looking the service stations are, the oil companies owning them have found they cannot get their dealers, generally, to keep them clean and shipshape. Nor will they keep order with the tools and equipment which the owning companies have to furnish. Stocks of merchandise are not kept up and last, but by no means least, dealers as a class are doing a terrible job of price maintenance. They only know one way to sell and that is downward.

The other week (June 21) we reported on the failure of the Iowa plan in Kentucky and Tennessee. In the June 28th issue we told of the trend to owner-operating in California. In an early issue we will report on its failure in its home state, Iowa. In fact there, many of the smaller oil companies who were for the "Iowa Plan" were for it only for the major companies but never adopted it themselves, as they today are operating one or more of their own service stations. The extent to which the "Iowa Plan" has resulted in poorer management of major company owned service stations, one supposes, the more "successful" therefore it has been to some of these jobber advocates of it.

Then there are other interesting news stories being gathered that will show most convincingly that the average individual dealer operating under the "Iowa Plan" has not the ability to properly manage his own business, how he needs the advice and training of supervisors who are studying the problem of merchandising all the time and translating their studies into sales and managing helps for the station man.

What the advocates of the policy of enacting legislation to overcome business disadvantages oftentimes overlook, is that those employes and distributors and merchants allied with the larger business interests are constantly going to school to learn new and better ways to run their businesses. "Big business" today so often is doing a right good job of educating all those associated with it. Too often, it appears, those who seek legislation to cure some of their

business troubles, are the ones who have refused to go to school and learn about better ways with better facilities and equipment.

"Big business," consisting of human beings, is not always thoughtful, generous, or even fair to its competitors but anyone who would observe it at all dispassionately cannot help but admit that the larger business units of the country in all lines and industries, are striving hard to teach all associated with them to do their work more efficiently and cheaply.

There are everywhere enough individuals who realize the value of this teaching, who try it out and find it profit-making, who adopt it for good and then take business away from their less progressive competitors.

Laws cannot overcome such "handicaps" even in totalitarian countries.

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"Labor" is Defying the Rights of American Citizens

Times are getting a bit harder for the "leaders" and "racketeers" of "labor." Even a decidedly pro-labor New Deal has refused to turn over the WPA and the rest of the United States to these "leaders" in the past week. The "strikes" of the "unemployed" WPA "workers" seem to be quieting down.

This month, at last a court of law in Los Angeles came to the rescue of a small refiner there who was caught in a labor union "strike." The court assessed damages against the local of the CIO-Oil Workers Union and held that these still are the United States and that the Bill of Rights has not been rescinded—yet.

This California case is about the rawest yet pulled by the "labor leaders" who have monkeyed with the oil industry so far. This CIO-Oil Workers Union "struck" and "picketed" the small plant of the Elm Oil Co. at Signal Hill, because its 13 employes—count 'em—refused to join the union. The plant was not only "picketed" but trucks hauling its products were blockaded, customers boycotted and the laws of this land and the Bill of Rights violated in many other particulars. The court ordered all this hi-jacking stopped and assessed damages against the union.

If there ever was a seizure of the powers of government, a revolution, in this country it has been going on the past six years and it has been conducted by so-called "labor" organizations with the knowledge and connivance and even outright assistance of the administration at Washington as well as others in public office over the country. The rights of the individual citizen have been and are being invaded and taken from him by strong-arm tactics just as much as they have been in Italy, Germany and Russia.

So-called "labor's" policy has been to assert that whatever it wanted to do is lawful and right and no one can have a contrary opinion no matter what the statute books say.

If 13 or any other number of men in a refinery do not want to join a labor "union" that is their business and no one else's. And the owner of that business and his customers have every right to the free use of the highways and streets, and every right to carry on their transactions without any molestation of any kind from so-called "labor."

Here in Cleveland last week, in the course of a "strike" at a General Motors company subsidiary, a "labor leader" loudly asserted that his men "had the legal right" to stop and question and lecture every one entering the plant on the subject of unionism. This "leader" did not admit that citizens of this country on their lawful errands do not have to stop and listen to anyone if they do not want to; nor did he admit that they can insist that they have a right not to be stopped or even spoken to.

It is such a flagrant infringement and defiance of the rights of the American people that will finally arouse them and probably, we hope, cause them to push all these would-be-leaders who thus violate the laws off the continent back to Russia or anywhere else that they belong.

The sooner the courts make the so-called "unions" pay for the damage they do and make them obey the laws of the land, the sooner will the honest and American rank-and-file of labor rise in their might and toss out these hi-jacking and revolutionizing "leaders" of theirs.

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"The Top o' the Mornin'" to M. L. Benedum, Oil Man

One of the nice things oil men do, but they could do it oftener, is throw a party for their friends. Because oil men are constantly on the move there probably are few industries where men see so much of each other and count so many friends.

So it was quite a party at Pittsburgh July 17 when more than 300 oil, steel and other business men came from all over the east to a birthday party for one of the grand old men of the oil industry, M. L. Benedum. They just came to say "hello" and give "best wishes" and then go back to their business again. A day and a few dollars from the busy days of big business men for a bit of human contact.

Mr. Benedum, and his partner J. C. Trees, started like most oil men, on a shoestring, in oil production. While considerable of Mr. Benedum's money has found its way into other activities in oil, he is still an oil producer with interests all over the country. He has had his "breaks," both good and bad, but through it all he has stuck to his first love which is production.

As this was a birthday party, we won't bother with a story of his life, but will just push up to the front table and get a slice of cake cut from under a miniature oil derrick rising on it, and join the rest of the crowd in wishing this veteran of the oil fields, the "top of the mornin'" and many more of them.

Pipeline of Future May Carry Coal Precipitated in Oil

CLEVELAND—A patent has been issued to Dr. Robert E. Burk, of Cleveland, Standard Oil Co. of Ohio chemist, which may revolutionize the transportation of coal.

Dr. Burk's invention (Patent No. 2,128,913) covers "shipping" powdered coal by pipeline, suspended or "dispersed" in a liquid—either water or oil.

Under the method, now only in the laboratory stage, Dr. Burk explains, when the powdered coal is to be dispersed in water, a small amount of soap is added to the water, which prevents the coal from settling out.

Arrived at its destination, a small amount of lime is added to the "liquefied" coal, precipitating the coal by killing the action of the soap. The coal may then be used in powder form, through use of blowers, or compressed into bricks for ordinary use.

No dispersing agent is necessary when the finely ground coal is to be dispersed in heavy oil for pipeline transportation, and at the destination, the joint oil-coal fuel may be used through specially adapted burners.

Several ocean-going ships have been using a similar fuel in their boilers experimentally for some time, among them some of the Cunard Line's vessels.

Oil Transportation News

Latest developments in freight rates, legislation, taxes, regulations, and new construction affecting the transportation of petroleum products by truck, barge, tanker, pipeline, and railroad.

Bill Would Require Itemizing Of Oil Transportation Cost

N. P. N. News Bureau

WASHINGTON, July 24. — Oil companies shipping by water or pipeline would be required to furnish purchasers an itemized bill, including transportation costs, taxes, and other charges entering into the gross selling price, under a bill (Senate Bill 2836) introduced by Sen. Hendrick Shipstead, Minn.

Sen. Shipstead's bill would amend the Federal Trade Commission Act to make it unlawful to sell an article or commodity at a price which includes specific charges for transportation "in excess of actual costs incurred for such transportation." It also would require sellers to furnish an itemized invoice setting out transportation, handling, tax and other items entering into the gross selling price of articles and commodities moving in interstate commerce. Bill has been referred to the Senate Interstate Commerce Committee.

The Minnesotan attempted to offer the measure as a rider to the Transportation Bill (Senate Bill 2009), when it was being considered in the Senate, but it was rejected with the advice of Sen. Wheeler (Mont.) and Reed (Kans.) that it be introduced later as an amendment to the Federal Trade Commission Act.

At the time, Sen. Wheeler told Sen. Shipstead:

"I appreciate why the amendment is offered. I do not believe it ought to be in this particular bill, because it is an amendment to the Federal Trade Commission Act. It is offered because I said that steel companies and oil companies which are monopolies are putting money in their pockets by the practice in question. The statement is correct and I repeat it. I should like to see a comprehensive bill to prevent that sort of thing."

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'Public Pays for Cheap Transportation'

N. P. N. News Bureau

WASHINGTON, July 24. — Rep. Van Zandt, Pa., a member of a railroading family, in a speech inserted in the Congressional Record, attacks the "High Costs of 'Cheap Transportation,'" charging that the consuming public does not get the benefit of the subsidies granted water carriers, and that therefore they should be regulated under the transportation bill.

In his printed speech Rep. Van Zandt quoted Sen. Wheeler, Mont., who said, in a speech before the Senate that "the public does not get one 5-cent piece benefit out of" shipment by water of their products by the big oil and steel companies.

"As a matter of fact," Rep. Van Zandt quoted Sen. Wheeler as saying, "when the companies ship oil or steel on the Mississippi River they charge the railroad rate from Pittsburgh to the particular point, whether the commodity is shipped by water or whether it is shipped in any other way."

In further support of his argument, Rep. Van Zandt referred to purported testimony of Mr. A. M. Stephens, general traffic manager of the Standard Oil Co. of Kentucky, alleging that Mr. Stephens asserted:

"We exercise our judgment and foresight in consideration of all these matters. We have found that none of the other companies are passing any of this money on to the consuming public . . ."

Rep. Van Zandt also quoted from an address by W. H. Reed, Memphis oil marketer, who backed a bill in the Tennessee legislature (which failed to pass) proposing a one cent per gallon tax on the throughput of marine terminals in that state. Mr. Reed contended that oil companies retained for themselves the "profits" from water transportation (See N.P.N., Feb. 15, 1939).

ICC Calendar On Oil Trucking

DECISIONS

T. L. Cunningham, Spokane, Wash. Certificate granted for operation as a common carrier of petroleum products in tank trucks from Attalia, Wash., to a defined territory in Idaho, over irregular routes.

HEARINGS

Howard E. Smith, Mt. Union, Iowa. July 28, Davenport, Iowa, on application to extend operations as a common carrier of liquified petroleum gas in cylinders in Iowa and Ill. over irregular routes.

R. J. Allison Co., Inc., Tulsa, Okla. July 31, Tulsa, on application for a permit as a contract carrier of petroleum products in Okla., Colo., Kans., Mo., Ark., and Neb. over irregular routes.

George W. Frey, Allentown, Pa. July 31, Allentown, on application to extend operations as a common carrier of lubricating oil and empty containers in Pa. and N. J.

Vurl Cloyd, Sidney, Iowa. July 31, Omaha, on common carrier application to transport petroleum products, etc., in Iowa, Nebr. and Mo.

James Reece Anderson, Ansley, Nebr. Aug. 1, Omaha, on common carrier application to transport petroleum products, etc., in Iowa, Nebr., and Kans. over irregular routes.

A. G. Briggs, Sidney, Iowa. Aug. 1, Omaha, on common carrier application to transport petroleum products, etc., in Iowa, Mo., and Nebr.

Shepherd Schurman, Chicago, Ill. Aug. 1, Chicago, on contract carrier application to transport petroleum products in Indiana over irregular routes.

Hopkins Trucking Co., Ponca City, Okla. Aug. 1, Tulsa, on application to extend operations as a contract carrier of petroleum products, etc., in Kans., Okla. and Mo. over irregular routes.

F. L. Greenwald, Monterey, Calif. Aug. 2, San Francisco, on contract carrier application to transport oil and gasoline, etc., in California.

Walter Pelz Transfer, Inc., Evansville, Ind. Aug. 2, Chicago, on application to extend operations as a contract carrier of lubricating oils and greases in Ill. and Ind. over irregular routes.

E. E. John, Billings, Mont. Aug. 2, Billings, on contract carrier application to transport petroleum products in Wyo. and Mont.

Geo. Taber, Billings, Mont. Aug. 2, Billings, on contract carrier application to transport crude oil and road oil in Mont. and Wyo.

Kansas Rails Propose Cuts

WICHITA, Kans., July 24. — Kansas railroads have docketed with the Kansas Corporation Commission, a proposal (KCC Docket No. 19220) providing for a reduction of 4 to 11 cents per hundredweight in Kansas intrastate petroleum rail rates from specific refinery and pipeline bulk points to destination.

Reductions range from 5 to 11 cents a hundredweight (from 0.33 to 0.814 cents per gallon on gasoline at 6.6 pounds) on shipments up to 285 miles, it was said. On distances from 285 to 645 miles, the proposed cut ranges from 4 to 9 cents a hundredweight (0.264 to 0.594 cents per gallon on gasoline).

Proposed scale of rates will not apply to interstate shipments. Rates from the Kansas-Nebraska line will be graded up to the Nebraska level, it was said. Same practice will apply on Missouri River points.

It is believed rails will be given commission's permission to establish proposed rates on one-day's notice. Opponents of the cut, if any, then could call for suspension of the reduced rates.

An expiration date may be attached to the proposal, transportation men said, so that if anticipated increase in tonnage is not attained, rates would revert back to present levels.

Rails Propose Cuts In Rate on 'Natural' To Arkansas Points

N. P. N. News Bureau

TULSA, July 24.—Rails propose, in Southwestern Freight Bureau's Docket 17356, reductions of 5 to 6 cents per hundredweight in casinghead (natural) gasoline rail rates from Louisiana, Arkansas, Oklahoma and Texas producing points to Arkansas refinery.

The proposal sets forth a mileage scale of rates from which specific point-to-point rates would be figured. This scale is graduated up from 4.5 cents a hundredweight on distances five miles and under to 23 cents for distances of 400 miles, with the following representative intermediate points —21 to 25 miles, 5.5 cents a hundredweight; 91 to 100 miles, 9 cents; 121 to 125 miles, 10.5 cents; 156 to 170 miles, 13 cents; 186 to 200 miles, 15 cents; 226

to 230 miles, 17 cents; 291 to 300 miles, 21 cents; 341 to 350 miles, 22 cents; and 381 to 400 miles, 23 cents.

Shown below are present and proposed rates on natural gasoline between representative points in cents per hundredweight:

	Present	Proposed
From Bastrop, La. to Smackover	13.0	8.0
From Bastrop, La. to El Dorado	13.0	7.5
From Gladewater, Tex., to El Dorado	21.0	15.0
From Gladewater, Tex., to Smackover	21.0	16.0
From Ft. Worth to Smackover	28.0	22.0

Susquehanna Pipeline Valued at $4,460,000

N. P. N. News Bureau

WASHINGTON, July 24.—Interstate Commerce Commission's 36th tentative pipeline valuation was released today, giving value of carrier-owned-and-used properties of the Susquehanna Pipe Line Co., Philadelphia, Pa., at $4,460,000 as of Dec. 31, 1934. Company's properties are all located in Pennsylvania and are used for transportation of gasoline. The line is controlled by Sun Pipe Line Co.

Town Votes Against Site For Wisconsin Plant

MILWAUKEE, July 24.—The Wisconsin Oil Refining Co. is considering sites near Milwaukee for its 5000 barrel refinery, after County Park Commission last week voted against rezoning land in the town of Lake, south of here, for industrial purposes.

Residents in Lake opposed the refinery as being unsightly and giving off odors. D. E. Foster, president of the refining company, said the plant would be virtually odorless, provide new tax sources and employment.

North Carolina Jobbers Plan Mid-Summer Meeting

NEW BERN, N. C., July 24.—The August meeting of the North Carolina Oil Jobbers Assn., will be held Aug. 5 at the Ocean Terrace Hotel, Wrightsville Beach, near Wilmington, N. C., according to J. H. Parker, president. A speaker of national prominence will speak, Mr. Parker says.

Maryland Tax Receipts Rise 14%

BALTIMORE, Md. — Maryland's gasoline tax collections in May were 14 per cent above sum collected same month of 1938, tax officials report, totaling $1,039,328 this year as against $911,117 for last year. Collections have been up each month so far this year above 1938. Maryland's tax is 4-cents per gallon.

Jobbers Say Consumer Benefits From Savings on Transportation

N. P. N. News Bureau

WASHINGTON, July 24. — Except for water transportation, gasoline prices in the U. S. would be considerably higher, Congressman Culkin, N. Y., told the House during the heated debate over the pending transportation bill.

Mr. Culkin is a member of a group of congressmen seeking to keep out of the bill provisions which would put water transportation under Interstate Commerce Commission regulation.

"If this legislation passes, I predict that gasoline prices in the near future will go up to levels comparable with some prices in Europe," he added.

Mr. Culkin characterized the ICC as an "affiliate" of the railroad lobby which would make the people pay for watered railroad stocks, and declared, "this bill is one of the steps in attempting to write into financial immortality the past performances of Jay Gould and Jim Fiske, and a host of other buccaneers that sailed the financial main under the black flag in the bad old days."

Backing up his statement that low gasoline prices in the U. S. are due to water transportation, the New York congressman read into the record affidavits from approximately 85 oil jobbers and distributors to the effect that consumers benefit from savings in costs resulting from these marketers using water transportation.

"These jobbers certify," said Rep. Culkin, "that the savings on transportation are always reflected back to the people."

Proponents of regulation of water carriers have contended that the only advantage of cheap water transportation was additional profits for oil, steel and other companies using the waterways, and that the savings were not passed back to the consumer.

Herewith is the list of oil men who, Mr. Culkin said, had filed sworn statements refuting this argument:

Marcelle D. Marran, president, W. R. Marran's Sons, Inc., Patchogue, N. Y.; A. H. Elkind, vice president, Elm Coal & Oil Corp., Mount Vernon, N. Y.; C. M. Clay, Jr., sole owner, C. M. Clay's Sons, Poughkeepsie, N. Y.; Willard G. Phelps, president, Phelps Oil Co., Inc., Glastonbury, Conn.; R. G. Phelps, vice president, Meenan Oil Co., Inc., New York City; James F. Breuil, president, Frontier Fuel Oil Corp., Buffalo, N. Y.

C. W. Gebhardt, secretary, United Oil Manufacturing Co., Erie, Pa.; Edward Shiner, treasurer, The Connecticut Refining Co., West Haven, Conn.; Frank S. Pulver, Pulver Gas & Oil Corp., Hudson, N. Y.; A. P. Byal, assistant secretary-treasurer, Allied Oil Co., Inc., Cleveland, O.; M. P. Austin, president, Chas. F. Austin, Inc., Detroit, Mich.

Jos. M. Patterson, president, Joseph M. Patterson & Co., Inc., Philadelphia, Pa.; William W. Miller, president, Major Petroleum Co., Philadelphia, Pa.; J. J. Theisen, president, Theisen-Clemens Co., St. Joseph, Mich.; J. H. Quackenbush, secretary-treasurer, Crown Oil Co., Harrison, N. J.; Benjamin Shapiro, secretary-treasurer, Commander Oil Corp., Oyster Bay, N. Y.

Albert P. Husted, Jr., president, A. P. Husted Co., Inc., Tarrytown, N. Y.; George F. Sinram, president, Marnis Oil Co., Inc., New York, City; S. S. Seltzer, vice president, Royal Petroleum Corp., New York City; W. H. Butler, vice president, Home Fuel Oil Co., Passaic, N. J.; H. Russ Van Vleck, president, Northern New Jersey Oil Co., Newark, N. J.

Harvey W. Lewis, secretary, Lewis Coal & Oil Co., Inc., Port Washington, N. Y.; Frank Schoonmaker, secretary, Maue Oil Co., Inc., Ossining, N. Y.; Kenneth R. Field, treasurer, Sunfield Co., Bridgeport, Conn.; F. P. Moynehan, president, Glens Falls Distributing Co., Inc., Glens Falls, N. Y.; William F. Bang, president, Bang Petroleum, Inc., Mount Vernon, N. Y.

Albert G. Schildwachter, secretary, Fred M. Schildwachter & Sons, Inc., Bronx, N. Y.; H. V. Peterson, treasurer, Hartol Products Corp. of New England, New York City; Roy A. Manning, treasurer, Manning Manufacturing Co., Rutland, Vt.; Frank J. Rella, president, Public Service Oil Co., Inc., Bronx, N. Y.; F. E. Knox, New England manager, James B. Berry Sons' Co., Inc., Boston, Mass.

Solomon Burwen, president, Leader Filling Stations Corp., Lynn, Mass.; Everett M. Smith, vice president, The Franklin Terminal Corp., Cromwell, Conn.; Ethel G. Johnson, assistant secretary, The Franklin Oil Equipment Co., New Britain, Conn.; Rose L. Meltzer, secretary, The Rackliffe Oil Co., New Britain, Conn.; W. A. Hamel, traffic manager, Cities Service Oil Co., New York City.

Barney Rogoven, secretary, Arguls Gas & Oil Sales Co., Inc., Brooklyn, N. Y.; Leon Steinberg, president, Concord Oil Corp., Brooklyn, N. Y.; William Regnemer, president, Stamford Oil Co., Stamford, Conn.; L. B. Stableford, president, Allied Oil Corp., New York City.

Joseph S. Hewlett, Hewlett Bros., Woodmere, Long Island; Warren Pfeifer, secretary, Terminal Petroleum Corp., Buffalo, N. Y.; Frederick R. Huberlie, president, Hub Oil Co., Inc., Rochester, N. Y.; M. Krechevsky, secretary, Hygrade Oil Co., Inc., Hartford, Conn.

LeRoy D. Kiley, president, Mitchell Oil Corp., Mamaroneck, N. Y.; Chas. J. Sheketoff, president, American Coal Co., Inc., Hartford, Conn.; Howard P. Sears, president, Sears Oil Co., Inc., Rome, N. Y.; R. P. Beardslee, general manager, Marine Oil Terminal & Storage, Inc., Cleveland, Ohio; J. Warren Pfeifer, president, Buffalo Oil Terminal, Inc., Buffalo, N. Y.

Wm. C. McTarnahan, president, Petroleum Heat & Power Co., New York City; J. H. Porteans, president, Valley Oil Co., Inc., Middletown,

Oil Industry Ranks High in Use of Trucks

NEW YORK, July 24. — The oil industry, with 91,361 trucks in 1333 fleets, ranks third among all industries in the number of trucks owned and operated, according to a report on 25,000 fleets operating 954,000 trucks in the 21st edition of Automobile Facts and Figures, published by the Automobile Manufacturers Ass'n.

The oil industry figures would be even higher if trucks of all oil jobbers were included in the report.

Only interstate haulers, and state, county and municipal governments operate a greater number of trucks than oil companies. Haulers operate 162,095 in 5376 fleets, while local and state governments operate 230,374 trucks in 1851 fleets.

Standard Oil Co. of New Jersey operating 12,000 trucks and 4000 cars has the largest fleet in the oil industry, and ranks second to the Bell telephone companies as the largest fleet operator in the country. Standard Oil Co. of Indiana has the sixth ranking fleet in the country, operating 6633 trucks and 1883 cars. Socony-Vacuum Oil Co. ranks seventh, operating 4245 trucks and 2589 cars. Shell Oil Co., Inc., is the highest oil company, operating 2749 trucks and 3779 cars, the report shows.

The "Facts and Figures" report applies the term "fleet" to instances of one company operating eight or more trucks.

There are over 10,000 oil jobbers in the U. S.—not to mention other types of marketers such as commission agents—and each of these has at least one truck. Obviously, the figure of 1333 fleets, with 91,631 trucks, listed for "oil, gasoline, greases" include hundreds of larger jobbers, but it doesn't cover the jobbers and other marketers who operate less than eight trucks apiece.

Conn.; Gaskel Goldstein, treasurer, Peoples Petroleum Products Corp.; Passaic, N. J.; Wilmer Stradley, president, Diamond Ice & Coal Co., Wilmington, Del.; F. L. Hayes, president, Nassau Utilities Fuel Corp., Roslyn, N. Y.

Irving Aronowsky, treasurer, Brooklyn Oil Utilities, Inc., Brooklyn, N. Y.; Samuel Gruber, president, Independent Oil Co. of Connecticut, Inc., Stamford, Conn.; M. J. Hoffman, vice president, The Michael Hoffman Fuel Co., Bridgeport, Conn.; George Lee, president, Southern Oil Co. of New York, Inc., Horseheads, N. Y.

Rocco Genovese, president, The Genovese Coal & Masons' Material Co., Stamford, Conn.; A. Caplan, president, Elm City Filling Station, Inc., New Haven, Conn.; J. Henry Esser, president, High Point Oil Terminals, Inc., Mount Vernon, N. Y.; Wm. A. Hall, superintendent, A. Brazos & Sons, Inc., Portland, Conn.

Geo. F. O'Neill, manager, The McElligott Fuel Corp., West Haven, Conn.; Wm. M. Farans, president, Penn Petroleum Corp., South Norwalk, Conn.; David Rubin, vice president, Benedict & Co., Inc., New Haven, Conn.; A. N. Alderman, secretary, Associated Gasolene Co., New Haven, Conn.; E. L. Cleaves, vice president, James B. Berry Sons' Co., Inc., New York City, N. Y.

Chester H. Canning, vice president, Pacific Oil Co., Fall River, Mass.; S. J. Buckley, vice president, Buckley Bros., Inc., Bridgeport, Conn.; Frank A. Fuhrmann, Swezey Coal & Feed Co., Port Jefferson, N. Y.; Walter H. Goodrich, president, Walter H. Goodrich & Co., Inc., New Haven, Conn.

M. H. Kurkjian, president, Solar Petroleum, Inc., South Kearny, N. J.; T. A. D. Jones, president, T. A. D. Jones & Co., Inc., New Haven, Conn.; Philip Levene, president, Pelham Coal & Oil Co., Pelham, N. Y.

J. Stickel, sales manager, Crown Central Petroleum Corp., New York City; Kenneth R. Field, treasurer, Sunfield Co., Stratford, Conn.; G. Willard Phillips, treasurer, Phillips Oil Co., Wallington, N. J.; E. M. Callis, president, Petrol Corp., Philadelphia, Pa.; LeRoy W. Van Zandt, owner, Rockland Fuel Oil Co., Haverstraw, N. Y.

Oil Tankers are Exempted From Transportation Bill

N. P. N. News Bureau

WASHINGTON, July 24.—Whittled down by the House Interstate Commerce Committee so that many types of water carriers — including tankers — are exempted from the proposed Interstate Commerce Commission regulation, the revamped general transportation bill (Senate Bill 2009) is the center of such a bitter battle on the floor of the House that it may not be passed at this session of Congress.

After several night sessions, and much wrangling, the measure appeared no nearer passage today than last week, as a Congress hopeful of early adjournment was being goaded by its leaders to take some action before quitting.

It is likely that, even should the House pass the rewritten bill, it will lie in conference until the beginning of the next session, as the Senate probably would not swallow the major changes which the House committee made in its bill.

Tankers of all types were definitely exempted from the water-carrier regulation provisions of the measure by the committee, when it inserted the amendment reading: "Nothing in this part shall apply to the transportation by water of liquid cargoes in bulk in tank vessels designed for use exclusively in such service and certified under regulations approved by the Secretary of Commerce. . . ."

It had been thought that earlier exemptions would make the act inapplicable to most oil tankers, as they excepted bulk contract carriers of "not more than three commodities at a time. . . " However the specific exemption of tankers made owners of these haulers of oil products breathe more easily.

As the measure was debated on the floor of the House, a strong bloc, led by Rep. Lindsay Warren (N. C.), battled for complete elimination of the water-carrier regulation provision. Warren denounced the water carrier section as "an outrageous sell-out of the producers and consumers of the nation," and asserted that ICC regulation of the water carriers would take from the South and West their last weapon in the fight against rate differentials."

"If you vote for this bill," he told members from western and southern states, "don't let me hear you stand up and whimper about rate discriminations."

Similar opposition to the bill was expressed in the committee's minority report, signed by Reps. South (Tex.), and Wadsworth (N. Y.), who asserted that the bill would increase transportation costs and "deprive the public of the benefit of cheap and flexible service now available over the national waterways."

The minority report likewise quoted a letter from Agriculture Secretary Wallace to Speaker Bankhead, in which he expressed opposition to the bill as one which would hold an "umbrella . . . over the inefficient plant and the present high rail rate level would be protected from the impact of vigorous competition."

Railroad statements indicate that the rails hope by this bill to solve their difficulties at the expense of agricultural and other shippers, consumers and taxpayers, Wallace said. (For general explanation of the bill see N.P.N., July 12, p.17).

New York City Zoning Change Irks Retailers

N. P. N. News Bureau

NEW YORK, July 24.—New York oil marketers are up in arms over proposed changes in the city zoning ordinance which apparently gives the zoning board power to ban existing service stations in certain areas after five years.

The proposed revisions would divide the city into five classes of districts, (1) residence (2) business (3) retail (4) restricted retail (5) unrestricted.

Oil industry activity—service stations, bulk storage, processing and manufacturing would be confined to unrestricted districts. A permit, however, may be granted for erection of a filling station or a commercial garage in a business, retail, unrestricted retail or residence district provided 80 percent of the property owners agree to such erection. Such permits would impose conditions and safeguards upon the construction and use of a service station or a garage.

The continuation of a gasoline filling station or a commercial garage in a district not conforming to such use under the proposed revisions shall be limited to 5 and 10 years, respectively. The proposed zoning law, however, does not state what shall happen to existing stations and garages at the end of such periods.

Presumably, they would have to file for a permit or a license with the zoning board to continue operations. The board could refuse to issue such a license, and the business would have to be suspended or removed to an unrestricted area, it was suggested.

It is this feature which has been attacked by the oil and garage industries in New York. A special council, made up of representatives of groups affected, has been organized to fight the proposed resolution. The first step, according to Sol A. Herzog, counsel for the group, will be a survey to determine how many oil stations and garages would be affected if the resolution is adopted. The council also is preparing some 5000 protests to be signed by affected parties and which will be filed with the zoning board.

Four-Cent Tax on Lube Oils Proposed To Aid in Balancing Wisconsin Budget

MILWAUKEE, July 24. — A proposal to tax lubricating oil 4 cents a gallon in Wisconsin, as a budget balancing measure, to be attached to the revenue bill now in the Senate will be vigorously opposed by jobbers, according to the Wisconsin Petroleum Ass'n.

Opposition of the Wisconsin association to the tax is threefold:

That the motorist and truck industry in Wisconsin already is paying more than its share to maintain the government.

That such a tax is certain to stimulate considerable out-of-state purchasing of lubricating oils.

That the tax actually will produce less than half the anticipated yield of $1,500,000 during the next two years, estimated by Governor Heil in his special message to the Wisconsin legislature recommending the lube oil tax.

Wisconsin has a gasoline tax one cent higher than neighboring states. Signs have been erected along the borders informing motorists that gasoline costs more in Wisconsin, it was pointed out.

"With this new proposed tax on oil," the association continued, "we can see large signs and billboards springing up on the borderline of neighboring states reading, 'Change oil here and save the Wisconsin tax,' or 'Take home one of our 10 gallon cans of oil and save the 40 cents Wisconsin tax.' Bootlegging will be the biggest industry in this state if this tax is enacted. No other state around us has such a tax."

Salvaged Oil Is Now Charged To East Texas Quota

AUSTIN, Tex., July 24.—Hereafter all East Texas oil salvaged from tank bottoms must be charged back against the East Texas allowable, according to a Texas Railroad Commission order signed last week by Commissioners Lon Smith and Jerry Sadler. The order rescinds an Oct. 29, 1937 ruling that only oil with less than two per cent of B.S. & W. had to be charged back and puts East Texas back on the same basis used in other Texas fields.

Move was an effort to "prevent waste by preventing production of crude oil in excess of market demand," it was announced.

Oil Marketers in Many Sections Praise Plan to End Price Wars

(*Continued from page* 9)

special favors to none) and quality merchandise.

The idea of the dealers pledging themselves to operate their businesses on a legitimate profit basis is sound, Mr. Schuh added. "The only way a price situation is ever improved," he said, "is for a few courageous operators to post a price that will return them a liveable margin and then hold to that price, despite what their competitors may be doing. It is only by some fellows sticking their necks out like this, that a cut-price situation is ever cleared up. But it takes guts to do it. That's why I think that the Oklahoma City plan is such a fine idea."

C. E. Ragen, president of Gasoline Retailers' Ass'n. of Metropolitan Chicago, and Paul C. Hudson, president of the Cleveland dealers' association, both said that their organizations would study the plan for possible ideas for use in their territories.

Following are some letters received commenting on the NPN articles on the Neighbors, Inc., plan:

From J. H. Parker, President, Coastal Oil Co., New Bern, N. C.

Your editorial and the article on plan of Oklahoma City Marketers is new and interesting. Laying one's cards wide open to the public would do much not only to clear up the mystery of price wars, suspicion and unethical practices of the station operator by the customer, but the appeal to "live and let live" would appeal to a great majority of the public—which is business, as the articles states.

I think so much of it that I intend to bring this article to the attention of North Carolina Oil Jobbers Ass'n. when they meet in two weeks at Wrightsville Beach, on Saturday, August 5th. Many sections of this state have suffered during the past several months from price wars—and stagnation of living wages.

* * *

From A. C. Gienapp, Secretary, Iowa Independent Oil Jobbers' Association.

Referring to the editorial and article on pages 24 and 25, of the July 19th edition, NATIONAL PETROLEUM NEWS, pertaining to the "Neighbors, Inc.", Oklahoma City campaign, in educating the public to pay a fair price for their gasoline, an effort, by which, to cure gasoline price wars.

The men who had the vision and courage to execute into action the plan are to be congratulated. More power to them. I am for any kind of a plan that will have a tendency to stabilize the market.

Here in Iowa, a good many communities have an "Oil Men's Club" or "Association," and our experience with them has been, and is, where a club of this nature is functioning, usually, the prices are normal. If they are not, it gives the dealers a nucleus or a sort of a clearing house, through which, they can voice their opinions, objections and etc., where competitor meets competitor on common ground, iron out their difficulties and go to work, all of them making a fair profit.

* * *

From G. A. Primm, Secretary, Illinois Petroleum Marketers Association.

Re article in the July 19th issue of NATIONAL PETROLEUM NEWS, on the "Hi-Neighbor!" movement which Oklahoma City jobbers and dealers have entered into as a means of educating the public on the effect of cut prices.

In our opinion the jobbers and dealers of Oklahoma City are to be commended for their ability to get together in a co-operative way in starting this movement. In our mind, the biggest thing that oil men have to overcome in any movement of this kind is to first convince themselves that they, and they alone, are the ones who can bring about better price conditions, and to be fair with themselves and their competitors in the marketing of their products.

There are too few oil men in the marketing branch of the industry today who have enough intestinal fortitude to post a price and stick by it. Many oil men seem to have an inferiority complex that their competitors are going to take all of their business if they stick by a profitable price. True, price has an appeal to the public, but so does quality merchandise, service, cleanliness, etc., and not all of the buying public regard price of primary importance in choosing the service station they patronize.

Effective salesmanship is the background of any business, but there are too many oil marketers who take the path of least resistance in telling their story to the buying public.

What the Oklahoma City marketers have done is no more than jobbers and dealers of any community can do if they will get together and be fair with themselves and their competitors toward the end of selling their products at a profit, no matter what the plan might be. To put it mildly, it is high time for oil marketers, large and small, to make up their minds that they are in business to make a profit and not merely to serve the public for the pleasure there is in it, or to swear vengeance upon some competitor whose greed for gallonage will ultimately bankrupt him.

Again we say what oil men of Oklahoma City are doing can be done in any community, if men of the oil industry will only get together in a co-operative way and resolve to sell their products at a profit to themselves.

* * *

From Herbert L. Clay, Secretary, Kentucky Petroleum Marketers Association.

I have read with interest the description and comment on the new marketing plan inaugurated by jobbers and dealers in Oklahoma City. "The proof of the pudding is in the eating thereof," and consequently I believe that the definite results which are ultimately obtained in Oklahoma City will be much more important than the opinion of anyone not having the opportunity to observe its actual operation.

It would seem that there is no good reason to believe the plan will not be as successful in any other community because, while those marketing in any given area are prone to believe that their situation is peculiar and different from others, yet neither Oklahoma City, St. Louis, Chicago, nor Cleveland have a monopoly on chiselers and chiseling tactics.

For a long time there have been too many in this business who have been substituting the "purchase" of business for the "selling" of their commodities. The Oklahoma City plan seems to be a step in the right direction in that one of its keynote is the selling of the public on the integrity of those engaged in the oil business in that community. They are substituting selling for the discount purchase of business.

* * *

From Frank S. Henline, Secretary, Nebraska Petroleum Marketers, Inc.

The Neighbors, Inc., plan now in operation by Oklahoma City Marketers is to be highly commended. It is the crystalization of an idea thought about and talked about by Lincoln marketers for some time and, I am sure by many other oil men in Nebraska and elsewhere.

Although there is considerable evidence to substantiate the contention that the purchasing public cares little if the oil dealer wants to cut-price himself to death; this attitude is the result of the misconceived notion that the service station can make money at any price.

Our motorists as a whole know very little about the service station business, its business methods or problems and unfortunately have had their attention drawn too much to price. The marketer has, if nothing else, done a thorough job of making his customers price conscious but oddly enough not to the degree that he himself is.

One great asset so commonly neglected by marketers, particularly in large places, is now being capitalized on by the Oklahoma City marketers and that is the *localizing* of their business. This, I think, is the key to the success of their whole plan. Too often the marketer has done everything else to get business and build goodwill except to convince his town trade that he is a local business man, participating and interested in local affairs, and activities for the good of his community.

Neighbors, Inc., is indeed an important development towards ending gasoline price wars and certainly contains refreshing hope to all those afflicted. It will work in Nebraska and any place else with assured success. It is not, however, the final answer promising permanent improvement until one more change occurs. The dealers and jobbers can not do this alone without the backing and the solid foundation of the right kind of merchandising policy on the part of the refining companies. They can not be left out

of the picture. To obtain any permanent improvement the refiner must surely have something to say about the way in which his products are sold and merchandised.

* * *

From Robert W. Hadlick, Executive Secretary, Missouri Independent Oil Jobbers Association, Jefferson City, Mo.

It appears that the Oil Men of Oklahoma City have hit upon a plan that has possibilities of really accomplishing a great deal of good for the oil industry, if it is properly managed and I take it that in Oklahoma City they have gone after the job in mighty fine shape.

It still remains questionable to the writer, however, whether or not such a plan can be made to work generally in spite of the great differential that exists in favor of the major oil companies. I bring this out for this reason—in the past year or so the major oil companies have succeeded in inducing dealer accounts who are their station lessees to reduce their prices 2 cents a gallon in many towns over the state of Missouri and at present and for the past year are and have been attempting to induce a dealer here in Jefferson City to break the market 2 cents a gallon.

The markets that have been broken by the inducement of these major oil companies have not been markets where abnormally high prices were being charged, but prices that permit of the dealers making a decent living. These dealers who lease their stations from the major oil companies, as a whole, would not sign up on such a plan as Neighbors Inc. for fear that when their renewal came up it would be cancelled. I do not know if this situation prevails in Oklahoma City, but it does in a majority of the stations over the State of Missouri and it is my guess that the percentage of those willing to sign up would be very small.

It is my belief that we must go much more deeply into the question of pipeline profits, etc. and iron out many of those angles before we can ever hope to really and truly get the oil marketing business on a basis where we will not have price wars popping up eternally. If the majors were forced to set up separate marketing departments on the divorcement basis then I would say that Neighbors Inc. would work very well.

Indiana Standard States Its Policy On Equipment

N. P. N. News Bureau

CHICAGO, July 24.—Standard Oil Co. of Indiana puts into effect July 22 a policy on the handling of aboveground equipment at dealer service stations when the company acquires or loses an account, setting up a price schedule on which it will buy or sell such equipment.

The company had set up a price schedule, effective June 1, on which it would buy or sell underground storage tanks on dealer accounts acquired or lost that had apparently precluded the company dealing in the aboveground equipment (See NPN, June 14, 1939, Page 9).

The policy on aboveground equipment effective last week sets prices on exchanges of gasoline pumps which are about 20 to 60 per cent under those in the NRA oil code equipment price schedule. On kerosine and lubricating oil tanks the Indiana Standard's new policy price is the same as in the code on five items, 16 per cent lower on one, and 25 per cent lower on another type of tank. On one item the Standard's schedule is $1 higher than the corresponding code listing.

The schedule for the company's policy on underground station storage tanks is the same as for the code (NPN, June 14, page 9), of $35 on tanks of 280 gallons, $50 on 550 gallon, $75 on 1000 gallon, and $100 on 2000 gallon tanks.

The Indiana Standard's schedule on aboveground equipment, compared to prices in the code, follows:

Equipment	Code price	New S. O. price
Blind gasoline pumps		
All makes, including Duplex, all sizes, 1 to 5 gals. capacity	$20	$10
Visible pumps		
Five gal. dry or wet hose—10 to 15 gal. dry hose visible	$20	$10
Dual bowl visible—all types	$20	$10
Five gal. blind pumps with 5 or 10 gal. visible attachment	$20	$10
Remote control visible	$20	$10
Air lift visible	$20	$10
Ten or 15 gal. visible wet hose, all makes	$40	$15
Ten or 15 gal. visible wet hose electric power operated	$50	$20
Electric meter pumps		
Electric flow meter pumps, with or without air separator	$45	$30
Electric displacement meter pumps, without air separator	$70	$40
Electric displacement meter pumps with air separator	$85	$70

On any of the above pumps furnished in twin type the price shall be double that of the single unit, both code and new S. O. price schedule.

New Indiana Standard price on electric computer type, displacement meter, pumps is net invoice price of original purchaser from the manufacturer less 10 per cent annual depreciation, minimum price $80.

Kerosine equipment		
Square tanks, 60 to 65 gals., with pump	$12	$12
Square tanks, 110 to 112 gals., with pump	$15	$15
Square tanks, 150 to 165 gals., with pump	$25	$20
Square tanks, 200 to 220 gals., with pump	$30	$25
Round portable tanks, 60 to 120 gals., with pump	$ 6	$ 6
Rectangular tanks, 60 to 65 gals., with pump	$12	$12
Lubricating oil equipment		
Rectangular 15 gal. tank	$ 3	$ 3
Rectangular 30 gal tank	$ 7	$ 8

Des Moines Pickets Ease Up on Stations

DES MOINES, July 24.—Picketing at eight service stations selling major brand gasoline was discontinued last week in the campaign of retailers to stabilize prices here through co-operation with the truck drivers' union.

The stations were picketed beginning July 10 for advertising gasoline 0.2 cent a gallon below prices generally posted at other major brand stations. Four of the stations are reported to be still posting on regular grade a 17.5 cent price, while four have advanced their price to 17.7 cents. Price sellers are reported to be posting prices down to 12.5 cents, and doing a large volume of business.

The retailer-union stabilization program started last spring, when prices showed signs of dropping. Several retailers are reported (NPN, May 24, page 34) to have asked a truck drivers' union to admit dealers to membership. First step in the program was to be elimination of price advertising signs.

A trackside price selling station was picketed for a while in late June, then the eight major brand stations about two weeks ago.

About 385 of the 425 dealers in Des Moines are said to be members of the union.

Southwest Michigan Crudes Hiked 5c by Ohio Standard

CLEVELAND, July 24. — Tri-Lakes Corporation, Standard of Ohio subsidiary, advanced its posting for Bloomingdale crude, Van Buren county, Michigan, 5 cents per barrel to $0.83. Tri-Lakes is the largest purchaser of Van Buren crude, buying more than 60 per cent of the field's 15,000 barrels daily average production.

Sohio Corp., crude purchasing subsidiary of Standard Oil of Ohio, announced that it had posted an initial price of $0.50 per barrel for crude produced from the McCloskey lime in the Griffin pool of Gibson county, Ind. Price of $0.85 per barrel was posted for oil from sand wells in Griffin county.

Sohio plans to build a pipeline from the Griffin pool to Mt. Vernon, Ind., on the Ohio River, where barge facilities will be utilized to move the crude to the company's Latonia, Ky., refinery.

'Gas' Tax Take Tops Estimates

N. P. N. News Bureau

WASHINGTON, July 24. — Federal gasoline tax collections during the fiscal year ended June 30 totaled $207,018,745.34, compared with $203,648,079.78 in the previous fiscal year, Internal Revenue Bureau reports.

The collections for the fiscal year just ended exceeded the Budget Bureau's estimate by $6,018,745, whereas the previous fiscal year's collections (ended June 30, 1938) were almost $3,500,000 under Budget estimates.

June collections of the federal tax (1 cent per gallon) amounted to $17,796,086.44, compared with $15,543,571.81 in June a year ago, and brought six-months collections for 1939 to $96,790,227.03, against collections in the first six months of 1938 amounting to $90,652,278.88, a gain of 6.7 per cent.

A tabular presentation of receipts from the three direct petroleum industry taxes for June and the first six months of 1939, comparing them with receipts in comparable periods a year ago, follows:

	June 1939	June 1938
Gasoline	$17,796,086	$15,543,572
Lubricating Oil	2,493,992	3,107,637
Pipeline Transportation	935,802	1,065,283
	First 6 Months 1939	**First 6 Months 1938**
Gasoline	$96,790,227	$90,652,280
Lubricating Oil	13,733,723	13,732,426
Pipeline Transportation	5,428,581	6,073,541

Bill Proposes 'Black List' For Wagner Law Violators

N. P. N. News Bureau

WASHINGTON, July 24. — Whether the House will get around to acting on the Walsh-Healey law amendments at this session, or will let them lie over until next session, was a matter for speculation among government purchasing officers today, following last week's passage of the amendments by the Senate.

An early adjournment of the session is forecast, and as yet no House action has been taken on the bill by Senator Walsh (Senate Bill 1302), which would make the wage and hour provisions of the original act applicable to contracts in excess of $4000 (instead of $10,000, as at present), would create a "blacklist" for firms violating the National Labor Relations Act, and would make the act applicable to sucontractors along with contractors on government business. The provisions are in the measure as it passed the Senate.

The "Blacklist" provision of the act is not so stringent as was proposed last session. Under the new amendments, no firm would be placed on the list of those ineligible to bid on government contracts until it has been found guilty "in a final adjudication by the appropriate court" of having "interferred with, restrained, or coerced . . . (its) employes in the exercise of their rights of self-organization, to form, join, or assist labor organizations, to bargain collectively through representatives of their own choosing, or to engage in concerted activities for the purpose of collective bargaining or other mutual aid or protection."

Under previous proposals, a "guilty" finding by the National Labor Relations Board would have blacklisted prospective government bidders.

The Walsh-Healey Law provides that bidders on government contracts must conform with certain labor practices with regard to minimum wages to be established by the Secretary of Labor (for specific industries), child labor, and maximum hours (an eight-hour day and a 40-hour week) as specified by the law.

Petroleum's stake in the Walsh-Healey law (although its record shows there is little need for wage and hour regulation) is indicated by figures recently released by the Labor Department showing that the federal government has purchased $114,606,719.54 worth of petroleum products under Walsh-Healey contracts since the law became effective in September, 1936. These purchases represent 11.45 per cent of all government purchases under the act—a total of $1,001,134,142.

Gasoline and fuel oil were, of course, the two major items in these purchases. Under 696 contracts for gasoline, $48,217,794.88 worth of motor fuel has been purchased in the two-year-eight-month period, and $46,666,365.26 worth of fuel oil has been purchased under 479 contracts. These two items alone account for 9.49 per cent of all government purchases under the act.

Asphalt, oil and tar purchases amounted to $13,697,498.62, on 439 contracts, and lubricating oils and greases for $3,149,912.89, under 67 contracts.

These purchases, of course, represent only those on contracts in excess of $10,000. How much more has been purchased on contracts ranging from $4000 to $10,000 has not been estimated by government purchasing officers, but it is believed that a large number of contracts not now covered by the law would be blanketed in if the W-H amendments cutting the exemption to $4000 were enacted.

Ohio Penn Grade Field Faces Loss of Market

N. P. N. News Bureau

CLEVELAND — The Ohio Penna. Grade Oil Association will meet at the Neal House, Columbus, July 28 to determine what action it will take in an effort to find a market for oil from the Macksburg, O. district when the South Penn Oil Co. ceases buying in the field Aug. 1.

The South Penn has announced that it will discontinue the purchase of credit balances of Pennsylvania grade crude gathered by the Buckeye Pipe Line Co. on that date. The company's buying unit, the Joseph Seep Purchasing Agency, at the same time will discontinue posting prices for the oil, the announcement said. Its current posting is $1.55 per barrel.

Production in the Macksburg district is about 3400 barrels per day, and most of it is from small producers the output of whose wells is about one-third of a barrel per well a day.

Three refiners, Ohio Valley Refining Co., St. Mary's, W. Va., National Refining Co., Marietta, O., and Valvoline Oil Co., East Butler, Pa., are said to have been taking approximately 1100 barrels a day, which will leave without a home between 2200 and 2300 barrels per day that the Seep Agency has been buying.

"It looks to me like the end of Pennsylvania grade oil in Ohio," one important observer of the situation said, "unless the smaller producers are willing to sell their oil at 10 to 15 cents per barrel under the market to attract more refiners in western Pennsylvania."

Stripper Wells Fear 'Divorce', Says Producer

N. P. N. News Bureau

TULSA, July 22. — Stripper wells would be penalized and eventually left without a market, purchases of wildcat production would be limited, higher prices to consumers would result, and "inevitably will come complete federal control" as a result of pipeline divorcement as provided in the Borah-Gillette bill now before Congress, Roy M. Johnson of Ardmore, Okla., director of the National Stripper Well Ass'n., the Independent Petroleum Ass'n. of America and the Oklahoma Stripper Well Ass'n. said in a talk July 20 before the Tulsa Chamber of Commerce.

Should pipeline divorcement come about, Mr. Johnson predicted that divorced pipelines would seek the source of crude with the greatest yield at the lowest possible gathering cost. Stripper wells would be penalized and eventually left without a market. Shutdown of these stripper wells, he said, would result in the loss of billions of barrels of recoverable potential oil reserves.

The chief incentive of the wildcatter would be gone, if such legislation were enacted, he added. At present, the wildcatter is assured of a pipeline connection and a market outlet. Under the proposed legislation no capital would be available for a line unless investors were assured that the investment was justified. He predicted that "soon we would approach the time when this country would have to import larger and larger percentages of its petroleum supply from abroad".

Higher prices to the consuming public would follow, Mr. Johnson declared, adding, that "then inevitably will come complete federal control". He said he wondered how many oil fields would then be discovered by bureaucrats sitting in Washington offices.

Probe Involves Louisiana Oil

(*Continued from page 9*)

reported to have instructions to co-operate closely with the federal grand jury which is understood to be examining any possible violations of the federal oil control laws.

Portion of Rankin's resignation to Gov. Long are as follows:

"You have requested that I resign as commissioner of conservation, giving as your reason that you had just become governor and you should be given the right to appoint the heads of all executive departments.

"Although I am a constitutional official and only removable for cause, it is my desire to aid you in giving the state a good administration. Therefore, I resign at your request and I wish you success."

Federal Grand Jury Looks Into 'Hot' Oil

By Teletype
N. P. N. News Bureau

WASHINGTON, July 25.—O. J. Rugge, special assistant to the U. S. attorney general, who is in charge of the federal phase of investigation in Louisiana, admitted today that "hot" oil was among the matters which a federal grand jury was inquiring into.

Although Interior Department officials have depreciated the idea that violations of the Connally "hot" oil law might be involved, it was regarded as significant that George W. Holland, director of the department's Petroleum Conservation Division, rushed to New Orleans a few days. Earlier, Clifford Howland, a department investigator, had been sent to New Orleans to "open up an investigative office."

DEATHS

So widespread is the oil industry that many friends are separated for years. NPN would like friends and relatives of any deceased oil man to send in notice of his passing for publication.

Samuel C. Phillips

Samuel C. Phillips, superintendent of Sinclair Refg. Co.'s Tulsa transportation department for 22 years, died at his Tulsa home July 16 of heart attack. He was 55 years old.

Illinois at Peak Soon, Compact Meeting Told

SANTA FE, N. M., July 21.—Illinois will hit its production peak of some 300,000 barrels daily some time this fall or early next year, State Geologist A. H. Bell told delegates to the Interstate Oil and Gas Compact Commission in session here July 19 and 20.

Geologist Bell, just as he did at the March meeting in Austin, Tex., held the attention of the delegates as he gave an up-to-the-minute report on activities in Illinois where lack of oil conservation laws is causing a premature depletion of excellent petroleum reserves.

The Salem pool, Mr. Bell said, is now producing approximately 57 per cent of the state's total. Asked by one of the delegates what was to be the effect on the reserves of the present wide open production tactics in some of the state's new fields, Mr. Bell replied:

"Under present production practices in Illinois, I think about 35 to 40 per cent of the oil in place will be recovered."

He then said that with conservation being practiced he was certain the percentage of recovery of oil in place would be considerably higher than it will be under wide open flow.

The two day meeting was packed with speeches by delegates and guests. While uniform operating practices was the chief topic the discussions wandered considerably from time to time.

Gov. Leon C. Phillips of Oklahoma in his speech declared there is no need nor justification for federal control of the oil industry. He said Oklahoma expected to be good neighbors to its sister oil producing states and to work out the mutual problems through the medium of the compact.

Recommendation that state conservation boards prohibit production from any pool in excess of the optimum rate of flow was made by E. de Golyer, economist reporting for the committee on minimum standards. He also urged proration orders which would stop the now prevalent practice of cross-drainage of leases. Two committees were recommended, one to study proration policies in the various oil producing states, and the other to make recommendations as to standardization of practices following a study of the report of the first committee.

Senator Clint Small of Amarillo, Tex., "father" of the conservation statute in Texas, administered a tongue-lashing to oil operators whom he charged "violate in Illinois the very conservation principles they pretend to praise in Texas."

Senator Small said that any state which disregards its duties is impoverishing its citizenship by the dissipation of natural resources necessary for the prosperity of the nation. "Let oil men who preach conservation in Texas," he said, "practice that same conservation in Illinois."

A. F. Schoeppell, Kansas corporation commissioner, told the compact commission delegates a new law in Kansas has required the issuance of new rules in that state, which will be announced July 26. He said the commission was studying the possibility of establishing a maximum potential of 2500 barrels daily for each well, regardless of its ability to produce. This would eliminate, he said the commission believed, the attempts in the past to get the highest potentials possible for their wells.

Excessive runs by refiners were blamed by Dr. A. G. White of the U. S. Bureau of Mines for the unsettled market outlook for the third and fourth quarters of this year. He recommended continued production of 1,500,000 to 2,000,000 barrels less per month than the bureau demand figures if crude stocks were to be brought in line.

New Completions Gobble Up Boost in California Quota

N. P. N. News Bureau

LOS ANGELES, July 22. — California oil producers will be called upon to take another hitch in their belts and curtail still further the output of producing wells during August.

Although the state-wide production quota was raised 3000 barrels a day for the month by the Central Committee of Producers meeting here yesterday, it was declared added proration was needed to provide a substantial part of the allotment to the unusually large number of new wells completed during July.

Extensive drilling operations, particularly in the prolific extension of the Montobello field, saw 98 new wells completed this month for an estimated potential of 126,000 barrels and requiring a combined allotment of 17,100 barrels daily.

While decline in potential of existing wells would provide a portion of this required new-well quota, the greater part must come from the boost in allowable and from additional curtailment on the part of large and intermediate producing wells. Maximum production from any well in the state was reduced from 250 to 240 barrels daily, which will mean further curtailment of 4500 barrels a day from the 450 so-called top wells.

Another curtailment of 3125 barrels a day will be effected by lowering the power factor used in determining individual well allowable from .760 to .757 This would mean added curtailment of 4 barrels a day on a well with potential of 1000 barrels, one barrel on potentials of 250 barrels and a fraction of a barrel on wells with less than this potential. It was estimated this change would affect some 8000 wells.

It was declared that a continuance of the high rate of new well completions would mean further reductions in the maximum allowed for large wells and a lower percentage from other wells subjected to curtailment, and that it would not be possible to go on raising the state quota.

One committee member said it was a mistake to raise the state allowable for August in face of the fact that in two months necessity would demand a reduction in the quota. However, a motion to continue with the July quota and substitute heavier curtailment of existing wells lost when put to a vote. Also defeated was the suggestion that the oil required for new well quotas be taken off the 450 wells in the top bracket.

July production reports reflected the new oil resulting from the large number of completions. Output for the state on July 20 was 606,803 barrels, against a quota of 595,275 barrels daily and compared with 600,305 barrels produced on the same day in June. Average production for the first 20 days of July was 617,567 barrels, compared to 609,558 in the comparable June period.

California Oil Bill Signed by Governor, Referendum Started

By Telegraph
N. P. N. News Bureau

LOS ANGELES, July 24. — California's new oil proration law, signed by Governor Olson July 21 and scheduled to become effective in 90 days, will be attacked by a referendum petition early next week.

Opponents of state oil control on the west coast must obtain the signatures of 132,573 qualified voters within the 90-day period in order to stop operation of the law and put it up to a vote of the people.

Indications were that the measure would not be submitted to this test before the next general election in November 1940, unless a special election is called for the purpose. It was believed the canvass for signatures would not be completed in time for the control law to be submitted to the electorate at a special election already called for next November 7th when another effort will be made to pass the "Ham and Egg" proposal giving California old people a pension of $30 every Thursday.

It was announced that J. A. Smith, president of the Independent Petroleum Ass'n. of California (not connected with the Independent Petroleum Ass'n. of America) will head the new Independent Petroleum and Consumers Ass'n., which will sponsor the referendum action.

Geologists Prepare for Silver Jubilee in 1940

N. P. N. News Bureau

NEW YORK, July 24.—The 25th annual meeting of the American Ass'n. of Petroleum Geologists will be held at the Stevens Hotel, Chicago, April 10 to 12, 1940, under the sponsorship of the Illinois Geological Society.

Officers of the geologists' association are: Henry A. Ley, Southern Cross Oil Co., San Antonio, Tex., president; L. Murray Neumann, Carter Oil Co., Tulsa, vice-president; E. W. Owen, L. H. Wentz, Inc., San Antonio, Tex., secretary-treasurer; W. A. Ver Wiebe, University of Wichita, Wichita, Kan., editor; and Donald C. Barton, Humble Oil & Refining Co., Houston, past president.

South Carolina Demand Up

COLUMBIA, S. C. — South Carolina's 6-cent gasoline tax brought the state $1,066,890 in June, a 13 per cent increase above collections in June, 1938.

'Gas' Demand in August To Break All Records

N. P. N. News Bureau

WASHINGTON, July 24.—Bureau of Mines estimates domestic demand for motor fuel in August at 52,900,000 barrels, five per cent above actual demand in August last year and about 300,000 barrels above the July, 1939 forecast.

If the August forecast is achieved, along with those for June and July, the seven-months domestic demand for motor fuel this year will amount to 364,506,000 barrels, a gain of more than 6 per cent over the same period last year.

Exports of motor fuel have been estimated as 4,200,000 barrels, the same as for July, but 629,000 barrels below actual exports in August a year ago.

On May 31, stocks of finished and unfinished gasoline were 84,200,000 barrels, and the June decline was estimated to bring them to 81,500,000 barrels. July estimates of the Bureau would bring them to 76,500,000 barrels, and for August the decline is estimated at 6,200,000, which would bring stocks on Aug. 31 to 69,300,000 barrels, compared with 70,962,000 barrels at the end of August last year.

To meet demand, the Bureau estimates the daily average supply of domestic crude at 3,521,900 barrels, which is 8,700 barrels above the July estimate and 10,200 barrels (or about 0.5 per cent) above the actual demand for August 1938. Estimated runs to stills of 104,080,000 barrels is 2,728,000 barrels higher than actual for August 1938, but almost half this increase represents an estimate for increased runs of foreign crude.

Benzol and direct sales of natural gasoline are estimated at 900,000 barrels, making refinery production 50,000,000 barrels, which was distributed among the refining districts as follows:

District	Barrels
East Coast	6,560,000
Appalachian	1,790,000
Indiana-Illinois	8,870,000
Oklahoma	2,970,000
Kansas-Missouri	2,570,000
Inland Texas	3,670,000
Texas Gulf Coast	13,250,000
Louisiana Gulf Coast	1,550,000
Inland Louisiana-Ark.	930,000
Rocky Mountain	1,260,000
California	6,480,000
Total U. S.	50,000,000

Natural gasoline to be blended at refineries is estimated as 6.5 per cent of the total production, or 3,250,000 barrels. The yield of 44.9 per cent estimated for straight run and cracked gasoline to the production of 46,750,000 barrels gives crude runs of 104,080,000 barrels, or 3,357,400 barrels daily. The estimate of foreign crude runs has been raised to 3,500,000 barrels.

Crude oil exports are estimated as 7,000,000 barrels, or 600,000 above the July estimate, and the estimate for fuel and losses is 1,600,000 barrels, which places total demand for domestic crude oil in August at 109,180,000 barrels, or 3,521,000 barrels per day.

Breakdown by states of the Bureau estimates of demand (which may be supplied either from stocks or from new production) is shown in accompanying table.

State	Forecast August 1939	Forecast July 1939	Actual demand August 1938
Texas	1,428,100	1,426,500	1,423,000
California	595,100	595,200	660,000
Oklahoma	448,100	456,100	545,000
Louisiana	259,300	264,500	253,000
Illinois	201,900	187,400	65,000
Kansas	168,700	160,300	161,000
New Mexico	111,000	116,100	92,000
Wyoming	77,100	73,200	79,000
Michigan	54,200	53,200	51,000
Pennsylvania	52,900	50,800	47,000
Arkansas	51,900	53,900	54,000
Montana	16,400	16,100	15,000
New York	16,000	15,400	13,000
Kentucky	15,000	15,900	18,000
West Virginia	11,000	10,700	9,000
Ohio	8,400	10,500	11,000
Colorado	3,900	4,800	4,000
Indiana	2,900	2,600	3,000
Total	3,521,900	3,513,200	3,503,000

'Gas' Demand for Last Half To Top '38 by 4%, Says API

N. P. N. News Bureau

CLEVELAND, July 24. — Domestic motor fuel demand for the last six months of 1939 is estimated at 289,700,000 barrels by the department of statistics of the American Petroleum Institute, a gain of 4.62 per cent over last year.

This compares with the estimate of 289,460,000 barrels, published by NATIONAL PETROLEUM NEWS in its July 12th issue, in its survey of the outlook for the oil industry during the rest of this year.

The API's estimate of total domestic motor fuel demand for 1939 is 546,969,000 barrels, while NPN's estimate was 547,000,000 barrels.

Domestic motor fuel demand for the third quarter is placed at 152,700,000 barrels by Fred Van Covern, director of the API statistical department, an increase of 6.05 per cent over the same period in 1938. The increase of this extent is largely due to the abnormally bad weather during July a year ago.

Domestic demand for the fourth quarter is estimated at 137,000,000 barrels by Mr. Van Covern, an increase of 3.08 per cent from last year. Demand during the last quarter of 1938 not only reacted to the unusually fine weather of that period but was also influenced by the highest rate of business activity of the year.

Exports of motor fuel will be under 1938 figures for the last half of 1939, Van Covern estimates, which will bring down the extent of gain of total motor fuel demand over 1938.

Mr. Van Covern pointed out that the rate of refinery operations the second quarter of 1939 was enough larger than demand so that gasoline stocks at the end of June were about at the level of a year ago, although they were 5,000,000 barrels less on March 31 of this year than March 31, 1938. To achieve economically desirable gasoline stocks of 61,000,000 barrels on Sept. 30, he says crude runs to stills would have to be held within 3,225,000 barrels daily during the third quarter. Actual crude runs to stills for the week ended June 24 were 3,430,000 barrels daily average.

'Gas' Stocks Topple Again

NEW YORK, July 24. — For the second consecutive week, gasoline stocks at U. S. refineries dropped nearly 1,500,000 barrels, according to a report of refinery operations compiled by the American Petroleum Institute today.

The drop in refinery gasoline stocks in the week ended July 22 totalled 1,456,000 barrels, the Institute's report shows. Last week, stocks dropped 1,407,000 barrels. The largest individual drop in districts reporting occurred at East Coast plants, where 880,000 barrels less storage was reported July 22 over the previous week. Oklahoma-Kansas-Missouri refineries had 241,000 barrels less gasoline in storage, while stocks at Indiana-Illinois-Kentucky refineries dropped 239,000 barrels.

Increases were reported at Appalachian, Inland Texas, Arkansas and N. Louisiana and Texas Gulf districts.

Crude runs to stills increased 5000 barrels on daily average during the week, and production of gasoline increased 16,000 barrels on daily average.

U. S. Crude Stocks Drop 2,219,000 Bbls. in Week

N. P. N. News Bureau

WASHINGTON, July 24.—Stocks of crude petroleum totaled 269,348,000 barrels on July 8, Bureau of Mines reports, having dropped 2,219,000 barrels during week previous to that date. A decrease in domestic crude stocks of 2,299,000 barrels was partially offset by an 80,000-barrel increase in stocks of foreign crude.

On July 9 (nearest comparable date last year) stocks were 290,469,000 barrels.

Stocks by grade or origin will be found in following table.

Weekly Changes in U. S. Crude Oil Stocks*

Grade or origin	June 24	July 1	July 8	Change from July 1
Pennsylvania Grade	5,601	5,661	5,749	+ 88
Other Appalachian	1,193	1,154	1,184	+ 30
Lima-Michigan	2,133	2,085	1,892	—193
Illinois-Indiana	13,904	14,099	14,170	+ 71
Arkansas	3,430	3,442	3,374	— 68
Kansas	6,884	6,490	6,450	— 40
Louisiana:	13,998	13,843	13,692	—151
Northern	5,652	5,780	5,727	— 53
Gulf Coast	8,346	8,063	7,965	— 98
New Mexico	6,564	6,409	6,290	—119
Oklahoma	69,707	69,459	69,452	— 7
Texas:	87,426	87,741	86,964	—777
East Texas	19,416	20,013	19,956	— 57
West Texas	16,101	15,877	15,824	— 53
Gulf Coast	20,700	20,997	21,089	+ 92
Other Texas	31,209	30,854	30,095	—759
Rocky Mountain	19,615	19,640	19,291	—349
California	38,570	38,566	37,782	—784
Foreign	3,272	2,978	3,058	+ 80
Total U. S. refinable	272,297	271,567	269,348	—2,219
Heavy in California	14,288	14,199	14,111	— 88

*As compiled by U. S. Bureau of Mines.

Latest Oil Industry Statistics

Trends of Basic Figures

	July 22, 1939	July 15, 1939	July 22, 1938
Crude Production (Bbls. daily)	3,583,705	3,529,700	3,349,050
Crude Imports (Bbls. daily)	89,140	80,570	73,000
Crude Runs to Stills (Bbls. daily)	3,395,000	3,390,000	3,221,000
Gasoline Stocks (Bbls. total)	77,960,000	79,416,000	77,835,000
Gas Oil & Distillate Stocks (Bbls. total)	34,366,000	33,673,000	*
Residual Fuel Oil Stocks (Bbls. total)	114,035,000	114,075,000	*

*Comparable figures not available.

Crude Oil Production for the U. S.

(American Petroleum Institute figures)

	Week Ended July 22 Barrels	July 15 Barrels	July 8 Barrels
Oklahoma	466,400	455,400	464,400
Kansas	178,100	166,750	167,600
Texas	1,343,300	1,325,750	1,347,700
Louisiana	275,850	275,850	274,750
Arkansas	62,550	61,400	59,550
Illinois	283,150	263,950	261,700
Eastern (Ill. excluded)	94,600	96,000	89,800
Michigan	68,250	67,550	69,150
Wyoming	67,650	62,100	57,700
Montana	16,200	15,950	16,150
Colorado	3,900	4,050	4,000
New Mexico	109,700	109,650	106,700
California	614,100	625,300	610,600
Total U. S.	3,583,705	3,529,700	3,529,800
Crude Imports	89,140	80,570	112,290
Total New Supply	3,672,845	3,610,270	3,642,090

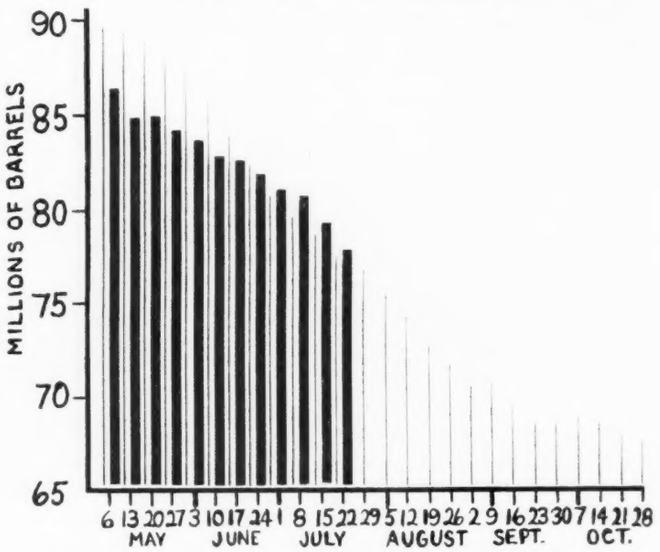
Inventories, June 30, 1939, of Pennsylvania Oils Other Than Lubricating Oils

(Compiled by National Petroleum Ass'n from reports of oil region refiners. Figures in barrels.)

Naphthas and Gasolines	
(1) Straight run, unblended and or unleaded, for sale as motor fuel	25,452
(2) Naphtha and gasoline, for sale for blending or further refining, or held at refinery for further distillation, reforming, blending or leading	282,857
(3) Below 65 octane, not included in (1) or (2) above	11,420
(4) 65 octane and above	440,932
Salable naphthas other than motor fuel material (do not include refinery process naphthas)	36,060
Kerosine	100,135
36-40 gas oil (include furnace oil)	51,377
Fuel oil (not reported above)	19,850
Oils held as cracking plant charging stocks	280,054
Non viscous neutral	22,652
Wax distillate	108,744
Crude petroleum	12,323
Wax (lbs.)	5,608,117

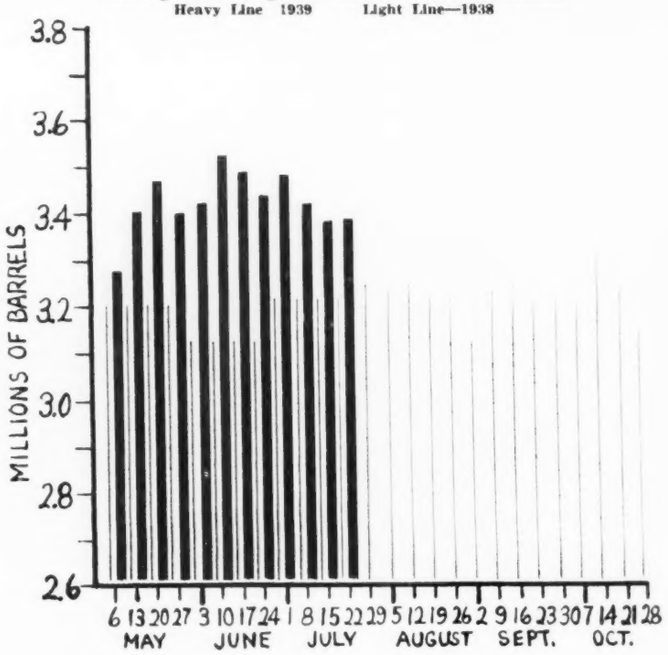
Total U. S. Motor Fuel Stocks

Heavy Line—1939 Light Line—1938



Daily Average Crude Runs to Stills

Heavy Line 1939 Light Line—1938



A. P. I. Weekly Refinery Report

(Figures in Thousands of Barrels of 42 Gallons Each)

Districts	Daily Average Crude to Stills Week Ended		Per Cent of Reporting Capacity Operated Week Ended		(a) Gasoline Production Week Ended		Stocks Total Finished & Unfinished Motor Fuel (b) Week Ended		Stocks of Gas Oil & Distillates At Refineries Week Ended		At Terms. Trans. Pipelines Week Ended		Stocks of Residual Fuel Oil At Refineries Week Ended		At Terms. Trans. Pipelines Week Ended	
	July 22	July 15	July 22	July 15	July 22	July 15	July 22	July 15	July 22	July 15	July 22	July 15	July 22	July 15	July 22	July 15
East Coast	561	546	91.2	88.8	1,601	1,578	20,774	21,624	5,276	5,008	5,559	5,592	5,228	4,966	3,942	3,914
Appalachian	109	113	85.2	88.3	414	421	3,270	3,241	218	220	64	64	405	409	.....	.....
Ind., Ill., Ky.	477	474	92.8	92.2	1,923	1,936	12,570	12,809	3,245	3,170	651	614	2,810	2,845	46	49
Okla., Kans., Mo.	265	268	77.5	78.4	(c)937	(c)935	6,470	6,711	1,484	1,455	49	52	2,800	2,883	.....	.....
Inland Texas	129	130	81.1	81.8	561	530	1,638	1,576	348	329	.....	.....	1,862	1,781	.....	.....
Texas Gulf	804	823	89.8	92.0	2,559	2,561	9,292	9,052	4,655	4,236	351	351	6,439	6,150	275	318
La., Gulf	138	135	95.2	93.1	327	342	2,131	2,292	1,154	1,200	27	29	1,496	1,522	255	273
No. La., Ark.	41	36	94.5	65.5	126	87	494	447	262	253	5	7	557	587	.....	.....
Rocky Mt.	42	40	65.6	62.5	166	191	1,401	1,484	108	109	.....	.....	597	625	.....	.....
California	482	477	64.7	64.0	1,362	1,381	14,915	15,030	8,319	8,547	1,831	1,692	61,822	61,536	23,126	23,862
Total Reporting	3,048	3,042	83.2	83.1	9,977	9,962	72,835	74,266	25,069	24,527	8,537	8,401	84,016	83,304	27,644	28,416
U. S. Total (d)	3,395	3,390			11,336	11,320	77,960	79,416	(e)25,829	(e)25,272	8,537	8,401	(e)86,391	(e)85,659	27,644	28,416
U. S. Total 7-22-39(d)	3,221				10,750		77,835		26,062				115,879			

(a) Includes straight-run, cracked and natural blended.
(b) Includes stocks at refineries, in bulk-terminals, pipe lines and in transit.
(c) 12% of reporting capacity in this district did not report gasoline production.
(d) Estimated, U. S. Bureau of Mines basis.
(e) For comparability with last year these figures must be increased by stocks "At Terminals, etc." in California district.

Refining Technology

INCLUDING INTERNATIONAL PETROLEUM TECHNOLOGY

Dear Reader:

On the front cover of this week's issue is the photograph of Paul C. Scullin who retired June 1 as vice president and general manager of the Indian Refining Co. and assistant manager of the refining department of The Texas Co. Mr. Scullin's life story proves once again that this industry is a democratic one in which it is possible to get to the top from almost any initial job.

Chemists and engineers are logical raw material from which refinery managers are made. Recently a former fireman from a boiler plant got to the top. Salesmen and lawyers have done it. Scullin got there from a most unlikely beginning, that of stenographer in the refinery office.

Scullin spent 10 years teaching after completing his schooling at the now defunct college at Lebanon, O. He quit as principal of the Southeastern Male and Female College at Jasper, Texas, to get a job in the post office of the boomlet oil town of Beaumont.

While working at the post office Scullin succeeded in installing some new ways of doing things which speeded up mail handling. But he was soon over at Beaumont's general store and it wasn't long before he had a job as stenographer at The Texas Co. refinery. That was in 1903.

During the next seven years Scullin held a number of jobs at the refinery. He was successively timekeeper, storekeeper, shipping clerk and stock clerk. He was made chief clerk when the company got big enough to need supervision of its clerical department.

Scullin was not a technical man but he must have picked up a lot of information about refining because in 1917 he was made departmental agent and assistant manager of the refining department, moving from the Port Arthur refinery to general offices at Houston. Later his offices were moved to New York and in 1923 the former stenographer was selected as manager of the refining department. He has been vice president of Indian Refining and assistant manager of the refining department since 1931.

★ ★ ★

In the oil refining industry the average employe helps create about $5000 in new wealth every year. From raw material and supplies costing two billion dollars the 100,000 employes produce refined products worth 2.5 billion according to figures of the U. S. Census Bureau.

That's why the oil refining industry is able to stand near the top of the list of industries in the wage level paid its employes. Supplied by the management with the best equipment that modern research has been able to devise the average refinery worker takes $20,000 worth of raw material each year and produces $25,000 worth of finished products ready for shipment to the market.

★ ★ ★

There were 83,183 daily and hourly wage earners at oil refineries in 1937. This number does not include the white collar office workers, technical and research employes on monthly salary, or executives.

These men were paid $140,414,750 in wages in 1937. That's an average of more than $1600 per man per year. The Census Bureau warns that no such calculation should be made because some of the employes were on part time work only. That means that the average annual wage of full-time employes was even higher than the report indicates on its face.

★ ★ ★

There is no indication that this will not be a good industry for the young man to enter in the future as well as it is today. If you need reassurance on that point read the address of Dr. T. G. Delbridge which he made as president of the A.S.T.M. at its recent Atlantic City meeting.

The speaker entered the industry not long after Mr. Scullin did and since that time has seen many estimates of future oil supplies announced and disproved. "If the 1908 estimate had been correct we would have no petroleum today," he said. "If the 1918 estimate had been correct, this country's petroleum would have been exhausted about nine years ago.

"If you must have an answer to the question 'How long?', perhaps 150 years is none too high. Therefore if any of you have sons or grandsons or daughters or great-granddaughters who want to enter the petroleum industry, it probably offers a more permanent outlet for hard work and keen competition than almost any business other than food and politics."

★ ★ ★

Recently we commented on the Twenty-Five Year Club which was organized in the petroleum industry at the A.P.I. meeting last November. In the course of the comment mention was made of contributions to the industry by Dr. Vladimir N. Ipatieff through his research into catalysis. We proposed his name for membership in the club.

The other day a letter came from Dick Wotowitch offering to welcome our nominee. Dick, chief organizer of the club, pointed out that he himself is the direct descendant of a Russian and hence would have an even warmer welcome for Dr. Ipatieff, if that be possible, than for any other old-timer.

Very truly

J. C. Chatfield

Managing Editor,
Refining Technology Edition.

150 Million Feet of Gas Processed Daily by U.S. Poly Plants

THE extent of construction of polymerization plants as accessory units for cracking processes has now reached the point where many refiners consider the process as essential and integral a part of the modern refinery as the stabilizer. A greatly accelerated pace has been taken in the installation of polymerization units in the past year and the extent of present activity in planning new units is said to be considerable.

Of nearly 60 catalytic units now operating, under construction, or being designed, half can be included as a part of the past 12 month's construction activity. All but six of 42 operating plants are in the United States.

Thermal polymerization first reached the commercial stage of operation in the Alamo refinery of the Phillips Petroleum Co., at Borger, Texas, in 1935. The Unitary process is licensed by the Polymerization Process Corp. through its licensing agent, The M. W. Kellogg Co., under the patents applying to this process of the Phillips Petroleum Co., Standard Oil Co. (Ind.), Standard Oil Development Co., The Texas Co., and The M. W. Kellogg Co. The process can handle without change in equipment either entirely saturated or highly unsaturated charging stock. Yields of 3.5 to 4 gallons per 1000 cu. ft. of rich natural or refinery gas are obtained at a cost of 1.38 to 2.77 cents per gallon, it was stated in 1936.

Starting out four years ago with a unit for handling 2,000,000 cu. ft. of olefinic gas daily at Shell's Wood River refinery and a plant for Pan-American handling 27,000,000 cu. ft. daily, the range of capacities of U.O.P. catalytic units has widened downward to include the so-called midget poly plants suitable for use in conjunction with the smallest cracking plants. The total rated gas capacity of 41 American plants, both thermal and catalytic, is estimated to be in the neighborhood of 150,000,000 cu. ft. of gas per day. Among these plants are units ranging in daily output of polymer gasoline from 20 barrels to 4500 barrels with octane number above 80. Because improvements in the process have reduced both the cost of equipment and operation, no refiner operating a cracking plant now can afford to be without a polymerization unit, says Dr. Gustav Egloff of Universal Oil Products Co.

Extent of Utilization

An idea of the extent of cracking that is being done now without polymerization may be obtained from the fact that the total number of operating cracking plants a year ago was 214 of which 90 were under 1250 barrels daily capacity. While only 41 of these plants, or roughly 20%, have polymerization units, the operating cracking capacity of these 41 plants represents close to 35% of the total operating cracking capacity of the United States. Additional plants to be constructed will raise these percentages still higher.

These figures and the accompanying list of polymerization plants do not include poly units installed in plants of The Pure Oil Co. The process used by Pure was developed by that company but has not been licensed to other refiners generally. Nor is there taken into account plants employing the Polyform process developed by Gulf Oil Corp. or similar processes which, while not being strictly a polymerization process, accomplish somewhat similar results by recycling cracked gases compressed to the liquid form, with cracking stock.

Early attempts were made to recycle gases produced in cracking operations, predicated upon a now discredited theory that the presence of the recycled gases would tend to restrain the formation of additional gases. No effort was made to segregate the more refractory constituents and the less refractory constituents of the gases before recycling. In later attempts, the gases were fractionated before recycling to remove hydrogen and methane. Under such conditions, there were obtained slight increases in yield of gasoline, without any substantial increase in anti-knock values.

More recently the diluent gases have been confined to those having 3 to 4 carbon atoms per molecule, including both saturated and unsaturated constituents. One of the great advantages of the process is said to be that, since operating temperatures for any given oil when cracked in

List of Poly Plants Installed or Under Construction, July 15, 1939

Thermal Polymerization Licensees of Process Management Co.

Company	Location	Gaso. Per Stream Day Bbls.
Atlantic Refining Co.	Atreco, Tex.	1,100
Atlantic Refining Co.	Pt. Breeze, Pa.	1,750
Humble Oil & Refining Co.	Baytown, Tex.	3,300
Phillips Petroleum Co.	Borger, Tex.	3,500
Phillips Petroleum Co.	Kansas City, Kan.	500

U. O. P. Catalytic Polymerization Licensees

Company	Location	Rated Capacity Cu. Ft. Gas Per Day
Atlantic Refining Co.	Philadelphia	2,380*
Barnsdall Refining Corp.†	Wichita, Kans.	1,560,000
Big West Oil Co.	Kevin, Mont.	250,000
Canton Refining Co.	Canton, O.	600,000
Cooperative Refinery Assn.	Phillipsburg, Kans.	350,000
Cosden Petroleum Corp.	Big Springs, Tex.	1,000,000
Derby Oil Co.	Wichita, Kans.	1,100,000
Fletcher Oil Co. Inc.	Los Angeles, Calif.	450,000
Home Oil & Refining Co.	Great Falls, Mont.	250,000
Johnson Oil Refining Co.	Cleveland, Okla.	1,000,000
Kendall Refining Co.	Bradford, Pa.	1,000,000
Leonard Refineries, Inc.	Alma, Mich.	250,000
McClanahan Refineries, Inc.	St. Louis, Mich.	500,000
Mid-West Refineries, Inc.	Alma, Mich.	500,000
Mohawk Petroleum Corp.	Bakersfield, Calif.	500,000
Northwest Refining Co.	Cut Bank, Mont.	1,000,000
Pan-American Refining Corp.	Texas City, Tex.	27,000,000
Pennzoil Co.	Oil City, Pa.	2,000,000
Quaker State Oil Refining Corp.	Farmers Valley, Pa.	1,000,000
Quaker State Oil Refining Corp.	Emlenton, Pa.	410,000
Quaker State Oil Refining Corp.	St. Marys, W. Va.	350,000
Richfield Oil Co.	Watson, Calif.	4,500,000
Root Petroleum Corp.	El Dorado, Ark.	1,071,000
	East Chicago, Ind.	3,000,000
	Houston, Texas	
Sinclair Refining Co.	East Chicago, Ind.	4,500,000
Sinclair Refining Co.	Marcus Hook, Pa.	4,250,000
Standard Oil Co. of La.	Baton, Rouge, La.	7,000,000
Sunray Oil Co.	Allen, Okla.	1,000,000
The Texas Co.	Lockport, Ill.	3,500,000
The Texas Co.	Port Arthur, Tex.	7,000,000
United Refining Co.	Warren, Pa.	1,000,000
Wilshire Oil Co. Inc.	Santa Fe Springs, Calif.	2,500,000

Selective Polymerization Licensees

		Bbls. Liquid Charge
Gulf Oil Corp.	Port Arthur, Tex.	2,400
Shamrock Oil & Gas Corp.	Sunray, Tex.	1,100
Standard Oil Co. of Indiana	Whiting, Ind.	4,500

* Bbls. liquid fuel.
† Under construction.

gas dilution are substantially higher than could safely be maintained when cracking the same oil without gas dilution, propane and butane conversion is high. It is this high degree of conversion per pass of the oil stock, which results in the ultimate increase in yield and quality of the gasoline produced. In cracking heavy oils the effect is only in somewhat increased yield.

The chief factor which has made the U. O. P. polymerization unit attractive to the numerous small refiners represented in the accompanying table is its low cost and simplicity. Contributing to the low cost of operation is the development of the process with respect to life of the catalyst. Increased life of the catalyst has made it no longer economical to include equipment for regeneration in the smaller units. Instead, the spent catalyst is replaced by new without regeneration and may be sold for fertilizer. This has reduced the cost of installation materially. At present many operators are producing 100 gallons or more of poly gasoline per pound of catalyst. One refiner is said to be obtaining 600 or more gallons per pound.

Catalyst Life Longer

This increase in the life of the catalyst has been due to improved conditions of operation brought about by closer control of temperatures, contact time, and improved design of catalyst chambers. Another factor which tends to improve catalyst life is the use of higher pressure. Reaction in the liquid phase instead of the vapor phase or mixed vapor-liquid phases has advantages in the larger units where the cost of maintaining these pressures does not offset resultant economies.

The catalytic polymerization process of today is essentially the same as when the first unit was built. However, varying conditions have made it practical in certain instances to deviate from the standard unit. One of the midget poly units, for example, has been constructed without its own stabilizer. The liquid polymer product is returned to the regular cracking plant stabilizer where it is absorbed in the regular motor fuel output. Most poly plants are provided with their own separate stabilizer which gives a maximum flexibility of operation and allows the polymer to be produced as a separate product.

Probably as great a deviation from the customary unit is exemplified in the Pennzoil plant described in NATIONAL PETROLEUM NEWS June 28, 1939. Instead of operating at the usual pressure of around 400 psi., this plant is operating with olefins in the liquid phase at 1200 psi. The employment of water jackets around the reaction chambers for removing heat to the incoming charge is also a novel feature not practiced in any other plant.

Another plant of considerably larger proportions is to be similar in construction except that it is to be charged with a selected fraction of butane and butylene which will be polymerized to iso-octene and then hydrogenated to commercial iso-octane. This plant is of the selective type while most of the catalytic units built so far have been of the non-selective type.

Most midget plants use only the stabilizer gases from the cracking plant. Whenever it is necessary, due to the peculiarities of the stabilizer system, to process all the cracked gases through the poly plant, arrangements are made for special treatment in the separator equipment following the poly plant. A deviation from standard practice at another plant is the provision for condensing all stabilizer overhead by cooling rather than by a compressor and charging the poly plant with liquid feed. The procedure is followed whenever a lot of cold water is available and condensing conditions are such that a maximum condensation of overhead can be obtained.

In the future more emphasis will be placed by Universal upon the polymerization of butane after its conversion to butene. At the present stage of development of the catalytic process this is economical only when butane has a very low value. At one plant, which has been described previously in greater detail, the excess butane of 1100 barrels per day is charged to a polymerization plant. This product is thermally decomposed or dehydrogenated to olefins in a butane heater at 1050-1100° F. and pressure of 750-1000 psi. and then passed through the standard catalytic polymerization step.

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REFINING TECHNOLOGY

July 26, 1939

Polymerization units are now operating in American refineries whose combined cracking capacities represent one-third of the total U. S. capacity yet half of these units are installed at plants having cracking capacities under 2500 barrels per day. During four years of commercial plant operation poly unit construction has maintained an accelerated rate, the past year accounting for nearly half the present number of plants operating, under construction, or being designed R-310

Simply controlled automatic equipment makes blending lubricating oils to many varied specifications convenient and fast enough for installation in a marketing plant. A leading advantage of taking the blending operation out of the refinery is that it minimizes tank storage requirements where consumer demand is widely variable. Time for blending and pumping to tank cars is little greater than pumping direct from storage R-312

Prediction of the performance to be expected from water cooling towers is a problem which resolves itself into a measurement of the atmospheric cooling effect under a given set of conditions. An empirical method of determining tower size has been worked out so that computations are not difficult. G. Russell Nance reported to the Mid-Year Meeting of the A.S.M.E. R-316

Saturated fatty acid esters are better as additives for reducing friction in lubrication than are unsaturated acid esters; the thiol esters are less effective in reducing friction than their corresponding oxygen esters R-320

New Patents R-323

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An exterior view of the largest lubricating oil blending plant of its type in the United States, Penola Inc., at Detroit. At the left is the warehouse; center, blending plant; right, boiler house; and fore ground, garage. Tank storage for 7,000,000 gallons of base stocks extends from the boiler house tow ard a dock on the River Rouge

729.1
738

Blends Lubes to Order from Base Stocks at Distributing Center

By M. G. Van Voorhis, N. P. N. Staff Writer

BLENDING three or four base lubricating oil stocks into a tank car of lubricating oil of almost any desired specification for immediate delivery is a specialty at Penola's modern new blending plant in Detroit. It is little more trouble than mixing up a chocolate malted at the corner drug store, according to C. L. Wentz, plant manager.

By moving this refinery finishing operation into a marketing plant, it is no longer necessary to keep large stocks of special oils, it was pointed out by D. V. Stonaker, vice president of Penola Inc. The high cost of transporting finished specialized lubricants was overcome since a few base stocks now can be delivered to the plant by tank ship from Bayonne or Bayway to Detroit and blended there to meet any requirements for industrial and automotive lubricating oils.

The heart of the Detroit plant, which is said to be the largest of its kind in the United States, is a Lummus-Cornell Homogenizer which is capable of blending up to four base lubricating oil stocks and adding very small predetermined proportions of the additives of Paraflow or Paratac. Continuous blending of stocks exactly proportioned by micrometer-adjusted proportioning pumps takes place at the rate of 2800 gallons per hour. In four hours after starting the Homogenizer a tank car can be ready for shipment. By adding more proportioning pumps to the Homogenizer unit any number of stocks may be blended into a single product. The Homogenizer blends the base stocks automatically and with micrometer accuracy in any proportions desired. The operator merely sets a series of micrometer dials on this ingenious machine for the proper formula proportions, connects the machine to the proper storage tank pipelines, and turns a switch. In case the supply of one of the base stocks runs low, or is not fed at the proper speed or in the proper amount, a control cuts the power and the machine stops, it is said.

What actually happens when an order for a lubricating oil with certain specifications is received, is that the proper proportions of constituent base stocks are determined by tables, charts, and/or computations. A laboratory sample of this blend is prepared and tested. Slight corrections are then made, if necessary, until the

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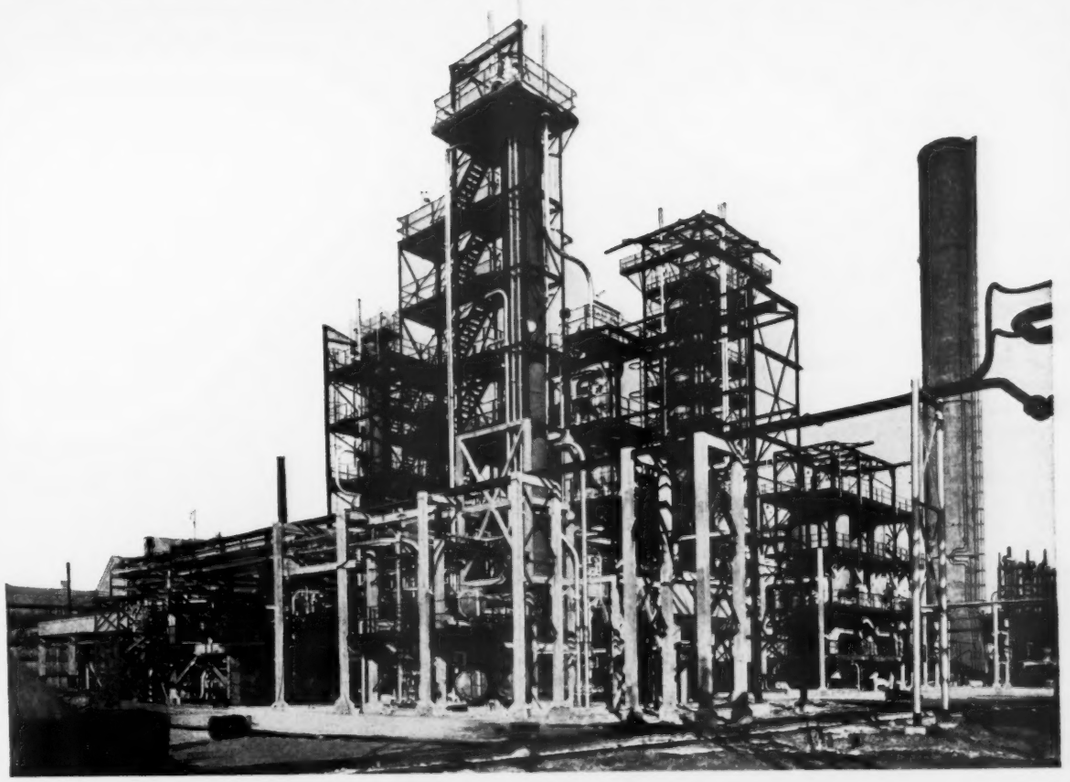

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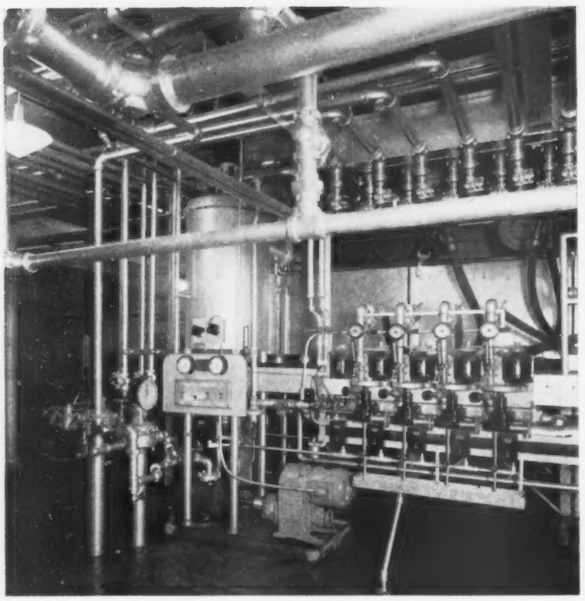

The heart of Penola's blending plant at Detroit is the Lummus-Cornell homogenizer. Its five synchronized motor-driven and micrometer-adjusted proportioning pumps combine predetermined quantities of base stocks and addition agents to the vertical blending tank at the left

oil meets the specifications exactly. The proportioning pumps are then set in accordance with the final laboratory determinations, flexible hose connections made to storage tank pipelines, and the Homogenizer switch turned on. When the first barrel has been blended it is tested again to see that specifications are met. The flow of finished blend is then delivered into barrels, tank cars, or storage tanks as desired.

Stocks for the Cornell Homogenizer are drawn from five 20,000-gallon tanks located above the blending room. Each of these tanks has four 5000-gallon compartments. Thus 20 different base stocks may be held ready for blending. Each has a convenient outlet near the Homogenizer to permit any desired combination of base stocks to be supplied through interchangeable quick-coupling hose connections.

In the accompanying illustration the Homogenizer is connected for blending two base stocks. Two hose connections are made from each of the two selected stock oils to permit using all four proportioning pumps simultaneously. This enables a higher rate of flow than if only two pumps were used. Thermometers are provided in the four lines so that corrections may be made in each variable delivery setting for temperature differences. Since the working tanks are all located side by side in the same room, the base stocks are ordinarily, but not necessarily, at the same temperature. Heater coils are installed in several compartments of overhead tanks where high viscosity stocks can be heated as necessary for easy handling.

The proportioning pumps are rotaries to which a micrometer adjustment controlling the rate of flow has been added. The electric motors driving the pumps are ordinary motors synchronized by V-belts connecting each motor shaft with the shaft of the motor beside it.

If any or all of the base stocks going into a blend are cloudy from moisture, the oil, after passing through the proportioning pumps, is heated to about 140 degrees Fahr. by steam in a thermostatically controlled heat exchanger before going to the blending tank. Since this tank normally operates under a high vacuum, any moisture is drawn off by the vacuum pump. The blend leaving the homogenizer is bright even though cloudy base stocks are used. The heat is only sufficient to offset loss of latent heat through evaporation, depending upon the percentage of moisture in one or more of the stock oils composing the blend.

The properly proportioned oil (dried if necessary) is delivered to the center of a slightly conical disk, rotating rapidly on a vertical shaft in the upper part of a vertical cylindrical tank. The oil is spread on the disk by centrifugal force in a uniform film about one-fifth the thickness of a human hair, it is said. The perifery of the rotating disk, moving at 150 feet per second, throws this film against a collector ring which deflects the oil downward into the lower part of the tank. This is the mixing operation and it takes place in a high vacuum to prevent foaming. When the oil rises in the Homogenizer tank above any set level the discharge pump shown below the tank starts automatically, delivering the finished blend to flow through a meter into barrels, tank cars or storage tanks as desired.

When the level of oil in the mixing vessel rises to a predetermined higher level, the proportioning feed pumps are automatically stopped. Starting and stopping of pumps is minimized in this installation by the use of a variable speed discharge pump which can be set with sufficient accuracy to maintain a nearly constant level.

A convenient check on the contents of the 20 compartments in Penola's overhead tanks is provided by five Pneumercator gauges each connected to four compartments. By manipulation of valves and by pumping air in the line with a hand pump, the volume of oil in any compartment may be read on an inclined mercury column scale.

Although the Homogenizer has been called the heart of the blending plant because it handles the important blending stocks it actually handles only a portion of the plant's throughput. A substantial part of the throughput is straight base oils, cutting oils, and sulfurized oils that are not run through the blending machine. Orders of a few barrels of lubricating oils or cutting oils are handled in one of four batch kettles shown behind the Homogenizer. These are capable of handling up to 12 barrels at one time. Motor-driven propellers do the mixing in these kettles. One is provided for light oil, one for dark oils, and two for cutting oils. Sulfurized cutting oils are prepared in one of the latter. For larger orders of cutting oils continuous mechanical mixers are employed. The plant is equipped with two of these, one of which is for sulfurized oils exclusively.

PUMPING cold base stocks from outdoor storage tanks in mid-winter would be an impossible task. The plant is equipped, therefore, with a steam plant. Several of the storage tanks are equipped with thermostatically controlled steam heaters. Pipelines into the plant are also steam heated by small steam lines running through the inside of the pipe. Sufficient heat is provided in the tanks so that pumping can start ten minutes after steam is turned on. Several motor-driven pumps are provided for this purpose to prevent contamination between various types of base stocks. Each pump is connected by manifolding, however, so that it is able to pump more than one oil.

When the pumps are shut down and the steam turned off compressed air is released in the steam lines to blow out and dry out any moisture that might freeze in the lines and cause damage. A compressor unit of adequate capacity is installed in the boiler room for this purpose. Air from the compressor can also be warmed in a heat exchanger and used for drying barrels.

Among the features of the plant that are of general interest are the facts that the plant property includes seven to eight acres of land, has 44 different storage tanks ranging in size from 16,000 gallons to one of 1,265,000 gallons, and has a total capacity of 7,000,000 gallons. Between the 44 tanks runs a 12-mile tangle of pipelines, two miles of which are within the building. Eight lines extend to the dock on the Rouge river. One of the interesting departments of the plant is its small but completely equipped laboratory which contains all the necessary equipment for making tests of lubricating oils.

At present the daily throughput capacity is eight tank cars but if provision were made for moving the cars twice a day instead of once, the plant could double this capacity, according to D. V. Stonaker, Penola's vice president.

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Water Cooling Tower Performance Predicted by Computation

By Russell Nance*

This is a condensation of a paper presented at the semi-annual meeting of The American Society of Mechanical Engineers, San Francisco, July 10-15, under the title "Fundamental Relationships in the Design of Cooling Towers."

ABSTRACT

The use of cooling towers in conjunction with industrial cooling problems of all types has become so general that engineers are becoming more familiar with their importance in both old and new fields of industry. A few of the more practical considerations relative to the selection of a tower and the determination of its principal dimensions are presented here to enable the prospective purchaser to analyze his specific problem and to enable him to make an intelligent decision regarding the engineering and economics of selecting a tower.

IN PREDICTING cooling tower performance which may be expected under various operating conditions, several methods have been proposed for aiding the engineer in the co-ordination of the initial and final water temperatures and the wet-bulb temperature. The problem resolves itself into a measurement of the so-called "cooling head", or the atmospheric cooling effect, under a given set of conditions.

An interesting method of co-ordination has been derived from the Ferrel psychrometric equation for determining the total cooling head in terms of water and wet-bulb temperatures and vapor pressures at these temperatures. However, procedure in actual practice may be simplified by expressing the amount of cooling available under a given set of conditions as a function of the allowable water concentration per unit of deck (or tower) area which will produce these temperature conditions in actual tower performance. This empirical concentration factor may be expressed as a function of the cooling head after suitable modifications have been made to take into account physical characteristics of the tower and certain cooling discrepancies.

An empirical method of determining the size of a tower is to consider the length as

$$L = QDW/CA$$

in which

- Q = water circulated per unit of time, gpm
- D = a design factor which varies with the physical characteristics of towers
- W = a factor which takes into account variations in wind velocity
- C = water concentration, gpm per sq. ft., Fig. 5.
- A = horizontally projected deck area corresponding to a unit of tower length, sq. ft.

The design factor *D* is used to correlate the relative effectiveness of towers of different widths, heights, and deck spacing. For a tower 12 feet wide and having a deck spacing of from two and a half to three feet, the factor varies with tower height approximately as shown in Fig. 3. Changes in width also affect the design factor, but not in any direct relation.

A typical relation between water concentration and temperature range is illustrated in Fig 1. The curves represent constant "approaches", i.e., the difference between final water temperature and wet-bulb temperature. The differences between the initial and final water temperatures are expressed as ordinates, and values of the allowable water concentration *C* are shown as abscissas. These curves have been based on a 70°-F. wet-bulb temperature, but they may be referred to other wet-bulb temperatures by multiplying the values of *C* by a correction factor K_{wb}, found in Fig. 2. A Fluor tower 12 feet wide and 35 feet high having 12 equally spaced horizontal decks was used in obtaining these curves.

Fig. 4 shows the relation between tower length and wind velocity. It is at once apparent that it is quite important to select a wind velocity which is representative of the actual conditions existing at the proposed tower site. If too high a value is used the tower will not be sufficiently large to cool the imposed heat load, while if the value is unnecessarily low a tower larger and more expensive than actually warranted will be indicated.

For unobstructed locations and average conditions a

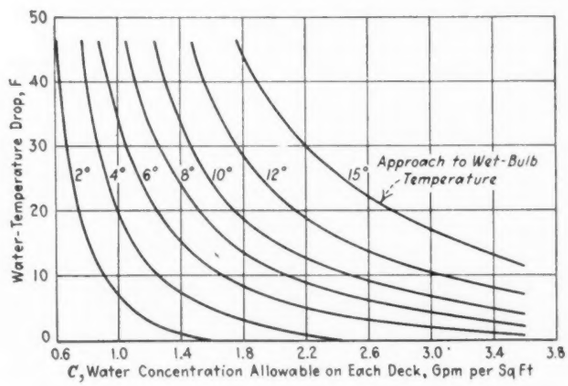


Fig. 1. These cooling-capacity curves are typical relations between water concentration and temperature drop for several approaches to wet-bulb temperature. The curves are based on a 12-deck tower, 12 feet wide by 35 feet high, a wet-bulb temperature of 70° F., and wind velocity of 5 mph.

*Fluor Corp., Los Angeles.

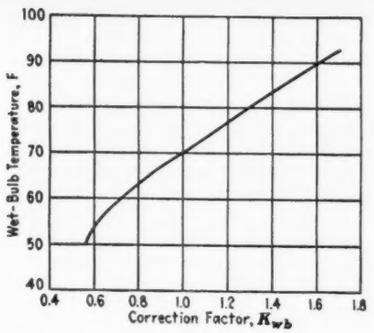


Fig. 2. Curves in Fig. 1 may be referred to other wet-bulb temperatures by multiplying C by the correction factor K_{wb}, determined on this curve

3-m.p.h. wind velocity is a safe figure to use, although Weather Bureau reports will usually show a 5-m.p.h. wind average. The values of C shown in Fig. 1 may be corrected to a 3mph. wind velocity by changing the abscissa scale by the ratio 1/1.25 as obtained from Fig. 4. The circumstances under which the plant is operating will decide in the last analysis whether an increase in tower size is justified by the savings resulting from a supply of lower-temperature water. Changes in wind velocity result in corresponding changes in the temperature range, providing the circulation remains constant.

Can Compute Tower Performance

The empirical equation is useful not only in determining the size of tower required for a given condition but also may be applied in other ways. Thus, if a tower of known size is available, the performance for a given water rate can be calculated. It is useful in deciding whether a tower is meeting its guaranteed performance. It is very difficult to find the temperature ranges and wind velocities mentioned in tower specifications all occurring simultaneously. By this method suitable values are chosen for the atmospheric conditions, and the tower length, circulation, or temperature range can be checked against either of the other two variables.

In specifying tower operating ranges, there should be borne in mind certain points, the application of which will result in more economical installations. The size of a tower required to handle a given heat load varies with the performance required and care should be used in specifying the wet-bulb temperature, the approach of the final water temperature to the wet-bulb temperature, the quantity and temperature range of the water being circulated, and the wind velocity.

Plant operation is often dependent upon the maintenance of a fixed minimum water temperature, and care should be exercised in selecting the most economical vacuum to maintain, or temperature at which to operate equipment, if such flexibility is allowable. As large an approach as is feasible should be used in order to keep the size of the tower within reasonable limits. In specifying operating conditions, an approach not less than 5° F. and preferably greater than 10° F. is recommended, depending upon the type of tower service.

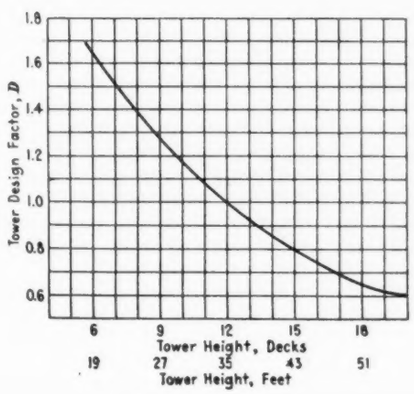


Fig. 3. Curves in Fig. 1 may be referred to other tower heights by using D to correct the values of C

As an example of the calculation of water circulation capacity for a given heat load and for varying temperature drops, a thermal load of 10,000,000 B.t.u. per hour is assumed and a further assumption is made that operating conditions make it desirable to keep the temperature drop between 25° and 10°.

The water circulation capacity equals the heat load divided by the temperature drop x 8.33 x 60. For varying temperature drops the water circulation capacities are as follows:

Case	Solution	Gpm.
1	10,000,000/25 x 8.33 x 60 =	800
2	10,000,000/20 x 8.33 x 60 =	1000
3	10,000,000/15 x 8.33 x 60 =	1333
4	10,000,000/10 x 8.33 x 60 =	2000

Table 1 shows the lengths of tower, 12 feet wide and 35 feet high, which would be required to handle these quantities, with the approach to wet-bulb temperature and the wind velocity being constant.

Table 1

Case	Length feet	t_1,F	t_2,F	Temp. Drop	t_{wb},F	Approach F	Projected Area, sq. ft.	Wind Velocity m.p.h.
1	55.0	94	69	25	60	9	660	5
2	60.5	89	69	20	60	9	725	5
3	68.5	84	69	15	60	9	822	5
4	77.0	79	69	10	60	9	924	5

If the wet-bulb temperature were 65° F., the approach to the wet-bulb temperature would be decreased to 7° F.,

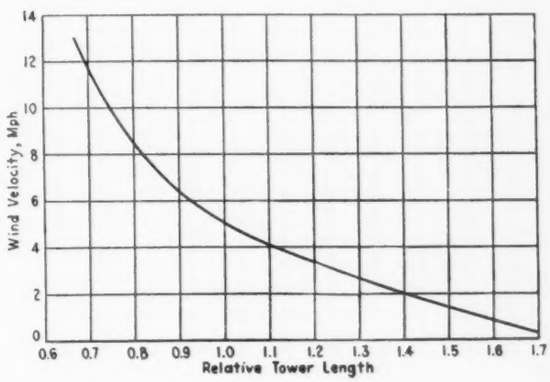


Fig. 4. The variation of tower length with wind velocity may be used to correct values of C in Fig. 1 by multiplying by (1/relative tower length)

making the final water temperature 72° F. If the wet-bulb temperature were 70° F., the approach would be decreased to 6°, making the final water temperature 76° F. Fig. 5 further illustrates the relation between capacity, range, and tower size. These curves have been computed for conditions in which the wet-bulb temperature, approach of the final temperature to the wet-bulb temperature, and the wind velocity have been held constant. With the exception of the broken-line curve, these values have not been based on constant heat loads. In general, it may be concluded that for the same heat load, less tower is required for cooling a small quantity of water through a large temperature range than is required to cool a large quantity of water through a small temperature range.

Economics of Ponds and Towers

In arriving at a final decisioin on a cooling system, it would be worth while to consider the relative economies of cooling ponds, spray ponds, and atmospheric and mechanical-draft towers. Cooling ponds are generally economical only when a natural pond is available. If the required capacity is large and extensive excavation work is required, initial cost will be high.

Cooling capacities of ponds are low per unit area.

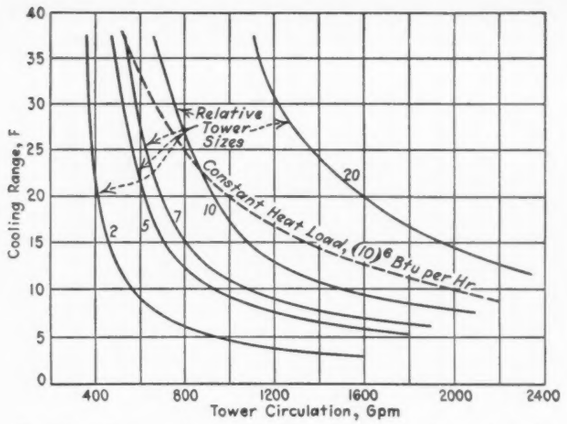


Fig. 5. Comparative tower sizes relative to water circulation and cooling range are plotted on the assumption of constant wet-bulb temperature, approach to wet-bulb temperature, and wind velocity

A larger capacity per unit area is afforded by spray ponds. These are frequently used when a large amount of space is available and the temperature range through which the water is cooled is small. As in the case of a cooling pond, the initial cost will usually exceed that of any type of cooling tower. In comparing a spray system with an atmospheric tower, it should be remembered that the pumping charges for the former will be about one-half of those for a tower, and the prevailing power rates probably will determine which installation is the more suitable to install and operate over a given period of time. If a large temperature drop is required, respraying will be required, and the pumping charges will then be comparable to those of a tower. Modern mechanical-draft cooling towers have proctically the same total pumping head as spray ponds when a low-head pressure-distributing system is used.

As far as water cooling is concerned, tower height has little effect, since the length is correspondingly increased according to the curve of Fig. 3 for towers having a given capacity. In selecting a site it will be necessary to place the tower broadside to the prevailing winds if the best performance is required.

Table 2

Cost Comparison of Atmospheric Cooling Towers

No. of decks	12	15	18
Tower size, ft.:			
Length	108	84	66
Width	18	18	18
Height	35	43	51
Concrete basin, cu. yd.	32	29	26
Pumping horsepower	55.0	65.5	76.0
Cost tower and basin (approx.)	$6,100	$5,825	$5,450
Pumping cost*	$2.280	$2.715	$3.150
Depreciation, tower and basin*	$0.387	$0.369	$0.346
Total cost*	$2.667	$3.084	$3.496

*Cost per 1,000,000 gal. of water pumped.

Low Towers Economical

In selecting the economical size of tower to install, a check should be made of the initial cost of towers and basins in comparison with the costs of pumping water over the towers. Table 2 outlines a suggested method of comparison. In this study atmospheric towers of various heights have been selected to cool 3000 gpm. from an initial temperature of 120° F. to a final temperature of 90° F. based on a wet-bulb temperature of 73° F. and a wind velocity of 3 mph. An arbitrary power rate of one cent per kw.hr. has been selected, and it is assumed that the initial cost of the tower and basin will be depreciated over a ten-year period.

The values are applicable only in this case, and will vary for different cooling ranges, tower prices, and power rates. The cost of the make-up water required to replace that lost by evaporation and windage and the cost of chemically treating this water have not been included in the total cost per million gallons circulated since they would be approximately the same for each tower. The property value of the tower site has not been included because of the difficulty in assigning a reliable value. The conclusion may be drawn that high towers are most economical in so far as the initial installation is concerned, but that low towers are more economical to use over a period of years.

If water is very expensive, it would be worth while to select a type of tower from which little water is blown out by the wind. A windage loss as small as 0.5% of the water being circulated will often exceed in value the original price of the tower within a few years. The water lost by evaporation is of course the same for any tower cooling water under the same conditions.

Forced- and induced-draft towers have a greater unit concentration than atmospheric towers, and because of this find a great application under conditions in which space is limited. A positive cooling effect is assured by the use of fans which force air through the tower, and when the wind is not blowing this is often of paramount importance in plant operation.

In comparing mechanical-draft towers with atmospheric towers, a tabulation of the same general type as shown in Table 2 may be used. In order to obtain a satisfactory comparison, the atmospheric tower should be based on a wind velocity of from 0 to 2 mph., since it is assumed that if the wind velocity were greater, an atmospheric tower would be less expensive to install and operate, providing the space were available.

In this comparison, it will be necessary to take into consideration the power requirement of the fan as well as that of the pump. Generally, the pumping head on a mechanical-draft tower will be less than on an atmospheric tower, so that the over-all power consumption on the former will not be as large in comparison as it would appear to be on casual inspection. Another compensating factor is that the price of a mechanical-draft tower is usually less than that of an atmospheric tower for the same capacities and cooling conditions.

An installation should be selected which will give the least total annual cost including both operating cost and fixed charges, and only a careful study of all the factors involved will show whether an atmospheric tower or forced-draft tower should be installed.

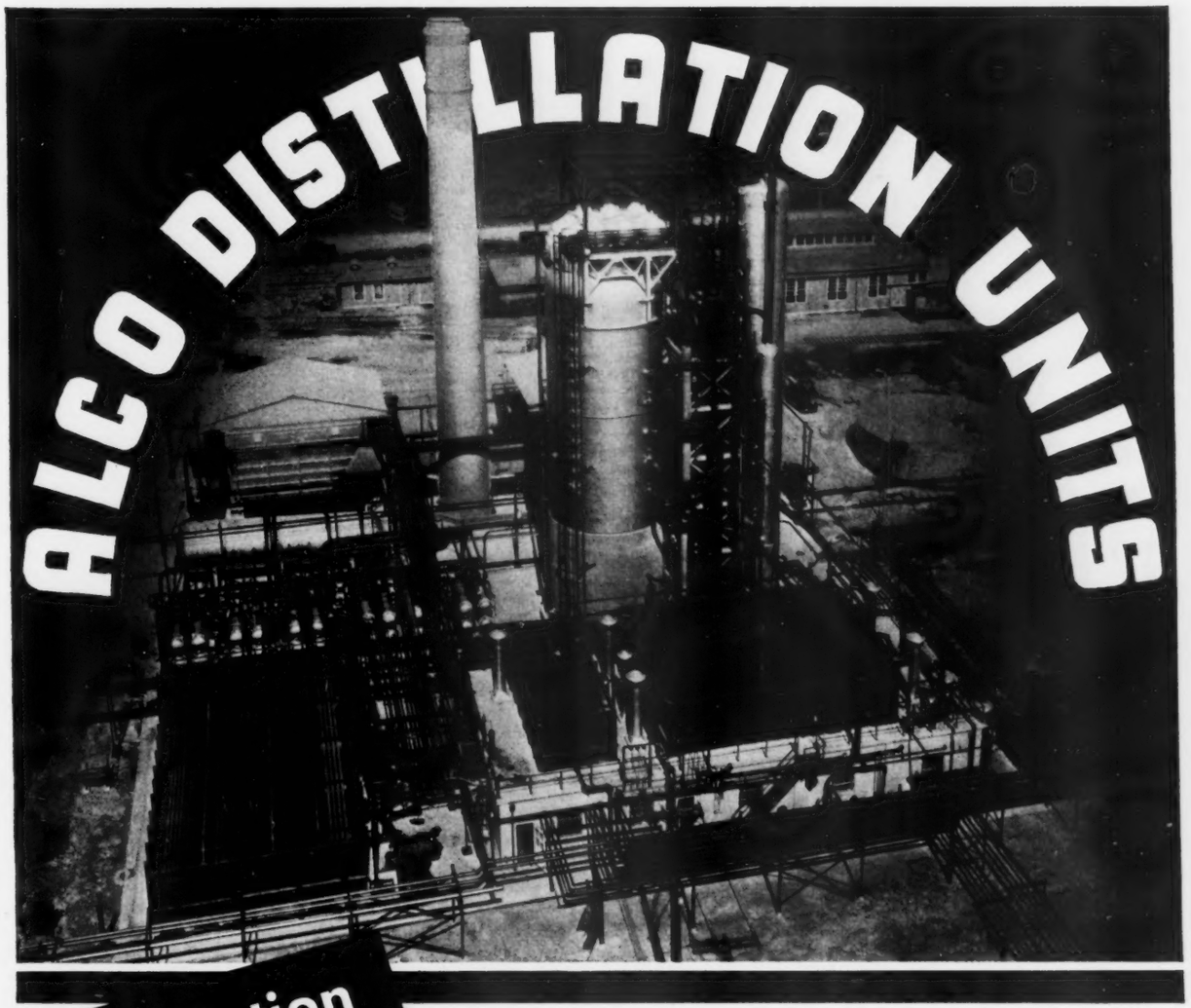
Simple Oil Oxidation and Gum Test is Proposed

A tentative laboratory test for the ring-sticking properties of lubricants was proposed at a recent meeting of the British Institute of Petroleum. In a paper by P. V. Lamarque, J. C. McNicol, and C. G. Williams of the Institution of Automobile Engineers the experience in the development of a single laboratory test which can be used for rating engine oils with respect to their "ring-gumming and oxidation propensities" was described.

This test consists principally in measuring the strength (mechanical adhesion) of a thin oxidized film from a small (about 0.25 gm.) sample of lubricant after heating in an electric oven to 180-240 degrees Cent. (356-464 degrees Fahr.). A shallow steel dish is used to contain the oil. A thin steel ring placed in the dish is lifted out and the force required to separate the ring from the oxidized oil is measured by a small tensile machine. The dish has a diameter of 33 millimeters with a 3-mm. rim at about 45 degrees. The ring is 15.9 mm. in diameter and 8 mm. cylindrical length with a removal bar across one end.

The authors showed that in lubricants which are prone to cause ringsticking in diesel engines the strength of the oxidized film is much higher than in lubricants giving comparative freedom from ring-sticking. In addition, it was shown that high film strength is associated with high viscosity index of the lubricant. In a limited number of the motor oils examined, volatility appeared to be a better criterion than the strength of the oxidized film.

Although the information so far is not extensive and the authors realize that ring-sticking properties require much more experimentation, it was believed that the work done at this stage would be of some interest.



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Effect of Fatty Acid Derivatives On Lubricants. . .

IV. Lubricating Properties of Aliphatic Esters

By A. W. Ralston,* E. J. Hoffman * and E. W. Segebrecht*

ABSTRACT

This is the fourth and last of the series of articles from the Armour Research Laboratories, presenting original research data on a large number of fatty acid derivatives applied to lubrication. The earlier articles were published in NATIONAL PETROLEUM NEWS as follows:

I. Dec. 9, 1936, page 59.
II. Feb. 8, 1939, page R-50.
III. Apr. 19, 1939, page R-150.

This article shows the superiority of the esters of saturated fatty acids over those of unsaturated acids, such as oleic, in their friction-reducing properties when added to mineral lubricating oils.

The thiol esters of these acids are not so effective in reducing friction as are the corresponding oxygen acid esters, when used as additives with mineral oils.

IN CONNECTION with our general study of the effect of fatty acid derivatives upon lubricants it appeared to be of interest to determine the lubricating properties of esters of the fatty acids and to compare the effect of various esters. This work was undertaken primarily to determine whether any generalizations could be drawn regarding the constitution of the ester and its lubricating properties. The general fact that the addition of esters of fatty acids to lubricating oils improves certain properties of the lubricants has been well established for some time. However, very little is known at present concerning the comparative effect of various esters. The following questions have never been thoroughly investigated: the effect of unsaturation in the alkyl chain of the acid, the possible superiority of fatty acid esters of higher alcohols such as amyl alcohol to esters of methyl or ethyl alcohol, the optimum chain length of the fatty acid, and the effect of the substitution of sulfur for oxygen.

This study was undertaken in the hope of answering some of these rather fundamental questions. It is our belief that the observations recorded, while they pertain specifically to the aliphatic esters, would be applicable to the fatty acid themselves, their soaps, and similar derivatives.

*Research Division, Armour & Co., Chicago, Ill.

†Ralston, Hoffman, and Stephens, NATIONAL PETROLEUM NEWS, Nov. 3, 1937.

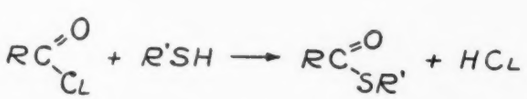
‡Ralston and Hoffman, NATIONAL PETROLEUM NEWS, Feb. 8, 1939.

The apparatus used has been previously described by Ralston, Hoffman, and Stephens† and by Ralston and Hoffman‡. The modification described in the latter article was employed in this work. All the samples were run under identical conditions, and the temperature increase of the oil was recorded after definite time intervals. It is, of course, realized that the load carrying capacity of the thiol esters is greater than that of the oxygen esters, but, since it was desired to compare the ability of the esters to reduce friction under similar conditions, no attempt was made to study the compounds under conditions unfavorable to the oxygen esters. Samples were prepared by blending 0.5 per cent of the various esters with a light lubricating oil which had the following physical characteristics: Saybolt Universal Viscosity 73.2 at 100 degrees Fahr.; 36.7 at 210 degrees Fahr. The various blends were then run for ninety minutes under the conditions previously described, and the temperature increase above room temperature was measured by means of a thermocouple immersed in the oil.

Preparation of the Esters

The alkyl esters of the fatty acids, such as ethyl palmitate or butyl oleate, were prepared by esterification of the respective acids with an excess of the proper alcohol in the presence of a catalytic amount of sulfuric acid. The esters were separated from the excess alcohol by diluting the mixture with water and were then washed with water until free of mineral acids. The esters were dried over anhydrous sodium sulfate. They were then distilled in vacuo, and fractions corresponding to the known boiling points were obtained.

The thiol esters were prepared by the action of acid chlorides upon mercaptans by the following general reaction:



The excess mercaptans were removed by bubbling nitrogen through the reaction mixture which was maintained at a temperature of about 50 degrees Cent. The thiol esters were then washed several times with water until all mineral acids were removed. They were then purified by fractional distillation in vacuo. Their compositions were determined by means of sulfur analyses.

The lubricating properties of the test oil and of the oil containing 0.5 per cent of the various esters were then determined as previously described. The temperature increases above room temperature after ninety minutes of operation with the test oil and with the oil containing 0.5

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per cent of the alkyl esters of the fatty acids are shown in Table 1.

Table 1

Temperature Increase After Ninety Minutes for Test Oil and for Oil Containing 0.5% of Various Esters of Fatty Acids

Ester	Formula	Temperature increase °F.
Untreated Oil	.....	96.4
Ethyl Palmitate	$C_{15}H_{31}COOC_2H_5$	79.0
Propyl Laurate	$C_{11}H_{23}COOC_3H_7$	84.8
Propyl Myristate	$C_{13}H_{27}COOC_3H$-	83.1
Butyl Myristate	$C_{13}H_{27}COOC_4H_9$	78.6
Butyl Palmitate	$C_{15}H_{31}COOC_4H_9$	79.6
Amyl Palmitate	$C_{15}H_{31}COOC_5H_{11}$	74.3
Ethyl Oleate	$C_{17}H_{33}COOC_2H_5$	88.0
Ethyl Esters of Unsaturated Acids of Fish oil*	.....	92.5
Propyl Esters of Unsaturated Acids of Fish Oil*	.....	90.2

* The esters were obtained by the fractional distillation of fish oil fatty acids. The iodine number was approximately 250.

Table 2 shows the temperature increases when mixtures of the control oil containing 0.5 per cent of various high molecular weight thiol esters were investigated. These were run under the same conditions as described for the esters listed in Table 1. The temperature increases recorded are the increases above room temperature after ninety minutes of operation.

Table 2

Temperature Increase After Ninety Minutes for Test Oil Containing 0.5% of Various High Molecular Weight Thiol Esters

Ester	Formula	Temperature increase °F.
Methyl Thiollaurate	$C_{11}H_{23}COSCH_3$	86.5
Methyl Thiolmyristate	$C_{13}H_{27}COSCH_3$	85.8
Methyl Thiolpalmitate	$C_{15}H_{31}COSCH_3$	83.7
Methyl Thiolstearate	$C_{17}H_{35}COSCH_3$	84.3
Ethyl Thiollaurate	$C_{11}H_{23}COSC_2H_5$	84.1
Ethyl Thiolmyristate	$C_{13}H_{27}COSC_2H_5$	81.0
Ethyl Thiolpalmitate	$C_{15}H_{31}COSC_2H_5$	86.5
Ethyl Thiolstearate	$C_{17}H_{35}COSC_2H_5$	82.7
Propyl Thiollaurate	$C_{11}H_{23}COSC_3H_7$	83.3
Propyl Thiolmyristate	$C_{13}H_{27}COSC_3H_7$	87.9
Propyl Thiolpalmitate	$C_{15}H_{31}COSC_3H_7$	85.6
Propyl Thiolstearate	$C_{17}H_{35}COSC_3H_7$	81.0
Propyl Thiololeate	$C_{17}H_{33}COSC_3H_9$	83.2
Butyl Thiollaurate	$C_{11}H_{23}COSC_4H_9$	87.2
Butyl Thiolmyristate	$C_{13}H_{27}COSC_4H_9$	82.4
Butyl Thiolpalmitate	$C_{15}H_{31}COSC_4H_9$	85.0
Butyl Thiolstearate	$C_{17}H_{35}COSC_4H_9$	81.8

Discussion of Results

Since the esters are polar molecules the results are interesting not only from a consideration of the lubricating properties of the various esters, but also as indicative of the effect of the constitution of the esters upon the polarity of the carbonyl group. The data illustrate the effect of such factors as the length of the hydrocarbon chains, unsaturation in the alkyl chain of the acids, and the substitution of sulfur for oxygen in the ester linkage upon both the lubricating properties and the polarity of the compounds.

It is assumed that the esters function by adsorption upon the metal surfaces. It is further assumed that the point of attachment to the metal surface is the carbonyl group and that the properties of the adsorbed esters are dependent upon the radicals attached to these carbonyl groups. It would appear that the greater the difference in the number of carbon atoms in the two groups R and R' in an ester RCOOR' the greater would be the polarity of the compound because of the more unsymmetrical nature of the ester. This, however, does not appear to be the case and the data obtained on the lubricating properties indicate that the reverse may be true. The blend containing ethyl palmitate gave a slightly higher temperature increase than that containing butyl palmitate while that containing amyl palmitate gave a much lower temperature increase than either the ethyl or butyl palmitate. The blend containing propyl myristate likewise gives a higher value than that containing butyl myristate.

The effect of unsaturation in the alkyl chain of the acid is very interesting. The data in Table 1 show rather conclusively that the addition of unsaturated esters produces decidedly higher final temperatures than the addition of a saturated ester. Ethyl oleate gave a much higher final temperature than any of the saturated esters, and the final temperatures of the blends containing the ethyl esters of the highly unsaturated fish oil acids were much higher than the mixture containing ethyl oleate.

In general, the blends containing the thiol esters gave higher final temperatures than the corresponding oxygen esters. The blend containing ethyl palmitate gave a final temperature increase of 79.0 degrees Fahr. whereas that containing ethyl thiolpalmitate gave 86.5 degrees Fahr. The propyl myristate mixtures gave 83.1 degrees Fahr. as compared with 87.9 degrees Fahr. for propyl thiolmyristate. The thiolstearates appear to be somewhat superior to the other thiol esters but not significantly so. The effect of unsaturation in the thiol esters does not appear to be so pronounced as in the oxygen esters. The difference in final temperatures between the blend containing propyl thiolstearate and propyl thiololeate is only 2.2 degrees Fahr., and the value of 83.2 degrees Fahr. for the propyl thiololeate is in line with that observed for most of the thiol esters.

Conclusions

1. The addition of alkyl esters of the fatty acids to lubricating oils produces blends which are more effective in reducing friction than the unblended oil.

2. Esters of saturated fatty acids are superior to esters of unsaturated fatty acids in their friction reducing properties when blended with hydrocarbon oils.

3. Thiol esters are not so effective as their corresponding oxygen esters in their ability to reduce friction when blended with hydrocarbon oils.

Gas Inflammability Data Revised and Expanded

A comprehensive survey of the available data on the inflammable limits of gases and vapors has been made available by the Bureau of Mines in a revision of its Bulletin 279, just published. The results of experimental determinations have been arranged, co-ordinated, and critically reviewed. The opportunity has been taken to include a number of results that have not hitherto been published.

An inflammable mixture of gases, such as methane and air, may be diluted with one of its constituents or with other gases until it is no longer inflammable. There are two limits of inflammability. The lower limit corresponds to the minimum amount of combustible gas and the upper limit to the maximum amount of combustible gas capable of conferring inflammability on the mixture. For example, for methane-air mixtures these limits under normal conditions are approximately 5 to 14% methane.

The new book contains 146 pages and nearly as many gases, vapors, and gas mixtures are included. Many results are shown for oxygen as well as air medium and some results are given for other atmospheres. The book is illustrated with many charts and tables, contains a bibliography of 267 references, and 10-page double-column index.

The bulletin is one of a series resulting from co-operation with the Safety in Mines Research Board of Great Britain. Dr. H. F. Coward, Sheffield, England, collaborated with G. W. Jones of the Bureau of Mines in the Pittsburgh Experiment Station under the supervision of A. C. Fieldner. Bulletin 279, under the title of "Limits of Inflammability of Gases and Vapors", is available in a paper binding from the Superintendent of Documents, Washington, D. C., for 20 cents.

New Patents

Compiled by R. E. Burnham, patent and trade-mark attorney, 511 Eleventh Street, N.W., Washington, D. C., from whom copies may be obtained at rate of 25c each. State number of patent and name of inventor when ordering.

June 27, 1939

REFINING

Purification of crystallizable derivatives of coal tar—J. H. Boyd, Jr., Philadelphia, assignor to Atlantic Refining Co. Filed July 18, 1936. No. 2,163,581.

Control of heat exchange—E. J. Houdry, Ardmore, Pa., assignor to Houdry Process Corp. Filed June 12, 1936. No. 2,163,599.

Means for separating constituents of crude oil emulsions—Hermann Passler, Vienna, Austria. Filed Sept. 2, 1936. No. 2,163,804.

Treatment of hydrocarbons—R. D. Snow, Bartlesville, assignor to Phillips Petroleum Co. Filed Dec. 20, 1937. No. 2,163,858.

Conversion of hydrocarbons—E. G. Borden, Little Neck, N. Y., assignor to Power Patents Co. Filed Mar. 3, 1936. No. 2,163,867.

Method of separating oil and wax—V. N. Jenkins, Long Beach, Cal., assignor to Union Oil Co. (Calif.) Filed Dec. 23, 1936. No. 2,164,013.

Process and apparatus for distilling oil—H. L. Dogerty, New York, assignor to Power Patents Co. Filed Feb. 24, 1920. No. 2,164,-132.

Countercurrent contact apparatus—D. S. McKittrick, Oakland, Cal., assignor to Shell Development Co. Filed Oct. 19, 1937. No. 2,164,193.

Purification and separation of gaseous mixtures—R. W. Millar, Berkeley, and R. L. Maycock, San Francisco, assignors to Shell Development Co. Filed Aug. 14, 1937. No. 2,164,194.

Apparatus for continuous distillation of high-boiling hydrocarbons to coke—Alfred Knudsen, Astra (Chubut), Argentina. Filed Feb. 10, 1937. No. 2,164,247.

Conversion of hydrocarbon oils and gases—W. E. Kuhn, Port Arthur, assignor to Texas Co. Filed Mar. 13, 1937. No. 2,164,293.

Compounded lubricating oil—G. L. Neely and F. W. Kavanagh, Berkeley, Cal., assignors to Standard Oil Co. (Cal.) Filed Feb. 7, 1936. No. 2,163,622.

Inhibitor and Motor fuel stabilized therewith—H. von Bramer and A. C. Ruggles, Kingsport, Tenn., assignors to Eastman Kodak Co. Filed Aug. 17, 1936. No. 2,163,640.

Diesel fuel—G. C. Crandall, Woodbury, and H. James, Paulsboro, N. J., assignors to Socony-Vacuum Oil Co. Filed Oct. 29, 1937. No. 2,164,151.

Esterification of allyl type alcohols and products resulting therefrom—H. P. A. Groll, Oakland, and George Hearne, Berkeley, Cal., assignors to Shell Development Co. Filed May 16, 1934. No. 2,164,188.

★ ★ ★

July 4, 1939

REFINING

Production of motor fuel—W. M. Marks, Lansdowne, Pa., assignor to Atlantic Refining Co. Filed Sept. 8, 1937. No. 2,164,334.

Process of separating wax from oils—E. M. Dons and D. B. Mapes, Tulsa, Okla., assignors to Mid-Continent Petroleum Corp. Filed Jan. 9, 1937. No. 2,164,391.

Method for distilling oils—N. K. Rector, Tulsa, assignor to Petroleum Engineering, Inc. Filed Mar. 29, 1937. No. 2,164,593.

Recovery of sulfur dioxide from acid sludges—D. W. Bransky, Chicago, assignor to Standard Oil Co. (Ind.) Filed Jan. 7, 1938. No. 2,164,637.

Sweetening high-sulfur motor fuels—T. H. Rogers and B. H. Shoemaker, Hammond, Ind., assignors to Standard Oil Co. (Ind.) Filed May 1, 1937. No. 2,164,665.

Solvent refining of hydrocarbon oil—F. X. Govers, Vincennes, Ind., assignor to Indian Refining Co. Filed Jan. 11, 1935. No. 2,-164,769.

Method of dewaxing hydrocarbon oil—E. C. Knowles, Beacon, N. Y., assignor to Texas Co. Filed May 20, 1937. No. 2,164,773.

Acid treatment of cracked distillates—M. T. Kendall, Long Beach, Cal., assignor to Texas Co. Filed June 15, 1937. No. 2,164,771.

Separation of wax from hydrocarbon oil—B. Y. McCarty, Beacon, N. Y., assignor to Texas Co. Filed Aug. 22, 1933. No. 2,164,776.

Solvent refining hydrocarbon oil—B. Y. McCarty and H. H. Gross, Beacon, N. Y., assignors to Texas Co. Filed Nov. 5, 1936. No. 2,164,777.

Recovery of wax—R. E. Manley, Yonkers, N. Y., assignor to Texas Co. Filed Mar. 15, 1938. No. 2,164,779.

Removal of wax from hydrocarbon oil—E. F. Pevere, Beacon, N. Y., assignor to Texas Co. Filed Mar. 21, 1934. No. 2,164,780.

Process of separating mercaptans contained in hydrocarbon liquid—D. L. Yabroff, Berkeley, and E. R. White, Albany, Cal., assignors to Shell Development Co. Filed Feb. 8, 1937. No. 2,164,851.

Lubricating oil—E. A. Evans, London, assignor to C. C. Wakefield & Co. Ltd. Filed Apr. 14, 1936. No. 2,164,393.

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July 11, 1939

REFINING

Production of high quality lubricating oil—Wolfgang Haag, Gerhardt Hofmann, and Hermann Zorn, Germany, assignors to I. G. Farbenindustrie. Filed Aug. 14, 1936. No. 2,165,372.

Production of lubricating oils — Gerhard Hofmann, Wolfgang Haag, and Hermann Zorn, Germany, assignors to I. G. Farbenindustrie. Filed Apr. 23, 1938. No. 2,165,373.

Oils of high viscosity index and process of making—J. M. Whiteley, Roselle, N. J., assignor to Standard Oil Development Co. Filed Aug. 23, 1935. No. 2,165,432.

Conversion of hydrocarbons—H. V. Atwell, White Plains, N. Y., assignor to Process Management Co. Filed Aug. 29, 1936. No. 2,165,-526.

Cracking hydrocarbon oils—P. J. Sweeny, Dickinson, Tex., assignor to Pan-American Refining Corp. Filed May 18, 1937. No. 2,-165,587.

Treatment of hydrocarbons—C. G. Gerhold, Chicago, Ill., assignor to Universal Oil Products Co. Filed Feb. 21, 1936. No. 2,-165,631.

Refining hydrocarbon oil—R. E. Manley, Beacon, N. Y., assignor to Texas Co. Filed Feb. 19, 1937. No. 2,165,638.

Apparatus for treating oil—L. A. Holmes, Whittier, Calif. Filed Mar. 3, 1937. No. 2,165,703.

Art of cracking hydrocarbons—H. L. Pelzer, Houston, Tex., assignor to Sinclair Refining Co. Filed Apr. 4, 1930. No. 2,165,725.

Process for removing carbon disulfide from coke-oven light oil—B. D. Sontag, Clairton, Pa. Filed Oct. 17, 1936. No. 2,165,732.

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Conspicuous under the company name in the sign in front of the Marine Oil Co.'s service station in New Orleans are the words, "Wholesale-Retail". The company wants station customers to know it is also in the wholesale oil marketing business

South's Fight Against Heat

Makes Market for Oil Jobber

Sales of fuel, lubricant and the cooling medium to refrigeration installations, where diesel engines supply the operating power, have been developed by a New Orleans oil marketer.

This marketer—one of the oldest independent jobbers active in business today—sees greater possibilities in this field as industrial refrigeration and air-conditioning of large buildings develops throughout the south.

This company sells fuel and lubricants to diesel engines on the farms and in other industrial uses besides refrigeration plants. It has also found tires and certain automotive accessories profitable items that fit into its established gasoline and oil business.

ONE of the oldest independent oil jobbers in the country has found a profitable market in connection with the south's increasing use of refrigeration in the manufacture and handling of foods, in large scale air-conditioning of buildings and for other purposes.

• • •

W. O. Hudson of New Orleans, who has been running an oil jobbing company there, the Marine Oil Co., for 37 years. He is standing in front of one of the road service cars his station operates to help their sales of tires

Where diesel engines provide the power to operate the equipment, this jobber, as he expresses it, "gets a three-way crack at this market". He sells diesel fuel oil, the lubricants for the diesel engines and he also handles ammonia, which is the refrigerating medium used principally in industrial installations.

Through his salesmen, who are diesel lubricating engineers, this jobber has also developed business in the selling of fuel and lubricants to diesel tractors on farms to diesel engines in general industrial uses.

The reader's first thought will likely

be that this is a new oil marketing concern, alert in looking for new lines, and without the years of experience in the selling of gasoline and motor oil which so many jobbing firms have had, and which sometimes makes it difficult for them to try out other goods and types of services.

On the contrary, the head of this company, W. O. Hudson of New Orleans is 74 years old, or 74 years "young", as it should properly be expressed, and he has run this oil jobbing company, the Marine Oil Co., for 37 years. When a lot of men who are heads of oil jobbing companies today were still in short trousers, this man was helping to organize the oil marketers of the country in their first national association. He had a hand in the fight of the few independent oil men of those days against the rebating to the Standard Oil Co. by the railroads of part of its freight costs.

One of the gasoline pumps at his service station in New Orleans still carries on the globe the Red Hat insignia the national marketers association adopted some 20 years ago, when it tried to have independent jobbers everywhere sell gasoline under a uniform brand name. He served for several terms on the executive committee of the organization, the Independent Petroleum Marketers Association in the days when its membership included independent jobbers who bought their gasoline in trainloads from the Mid-Continent.

Mr. Hudson is still active in his company. He is at his desk every morning and that desk is not in a private office but in a big room his office force and salesmen use. He hears the salesmen's reports and he gives them a slap on the back as they start out on their day's work.

MR. Hudson thinks the opportunities for the independent oil marketers in the future will be largely in other products than gasoline and motor oil and in services that can be developed around the increasing use of internal combustion engines. He believes the growing application of diesel engines in many kinds of industrial and farm service provides a market the oil jobbers should not overlook and in the south particularly he is of the opinion that refrigeration will be used to a much greater extent in the future both industrially and for the comfort of people through air-conditioning, and that this will bring opportunities to oil marketers.

Because of the intense competition in the wholesaling of motor fuel and motor lubricants, he sees for the future limited profits for oil companies in these products; but he says they are the necessities for motorists the oil companies will carry, as the grocer carries flour and bread and sugar. Around them the oil jobber can build a profitable business, fashioned in each case according to the capabilities of the individual marketer and the needs in his trade territory.

W. O. Hudson as he looked some years ago

The Marine Oil Co. in its early years had a big business selling cylinder oil to the sawmills that were operating over this section of the south. Mr. Hudson had traveled this territory for the Standard Oil Co. when there was just one Standard company for the entire country. He knew the sawmill owners. He said it was nothing unusual for him to sell a carload and a half a month of cylinder oil to these mills. He bought his oil from the National Refining Co., one of the pioneer independent refining companies. Then the sawmills began to go out of business as the timber lands were cut over until now the Marine Oil Co.'s sales of this product to sawmills are a few drums a month at the most.

THEN came the tremendous growth in the use of motor vehicles, and the gasoline and motor oil business grew faster for a time than the oil marketing companies could expand to take care of it. That boom period passed and increasing competition began to cut the profit in this business. But Mr. Hudson, in the meantime, had been looking for new markets. He found them in connection with the growing use of refrigeration in his section of the country and the operation of these systems with diesel engines.

The refrigeration systems are used on ships, at ice plants, meat packing houses, breweries, ice cream and candy manufacturing plants, hotels, hospitals and of course in the last several years in connection with air conditioning of many buildings. Mr. Hudson says the independent jobber can give just as good service on this class of business as the large oil companies. He picked his diesel lubricating oil salesmen by taking the men from the diesel engine companies who were qualified in the mechanics and operation of the engines and then he gave them his own training in selling, built largely around the service he could offer. He buys his stocks in tank car lots and does his own blending of his diesel lubricants, carrying four grades, the oils being very similar to the regular automotive motor oils.

WITH the operator of a diesel engine, the first thought when something goes wrong, is to blame it on the oil, says Mr. Hudson; thus it is important for the oil company to be able to give service promptly and also to have a man competent to diagnose the trouble and fix it himself if it is a matter of simply servicing. He gave this example of the service his company renders, through a salesman who is also a licensed engineer.

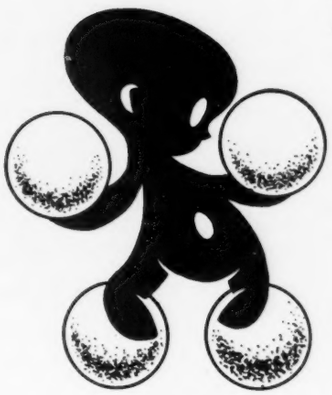
A call came to the Marine Oil Co. from a small town near New Orleans. It was after working hours but the salesman started at once for the scene and arrived in the evening to find the owner of the plant away. He left word to be called when the owner returned and went to the local hotel. It was three o'clock in the morning when he was called back to the plant, but the diesel was fixed and ready to operate in the morning and the operator knew the trouble was not the fault of the oil he had been using.

THE Marine Oil Co. handles fuel oil for diesels, although there is not great profit in this, Mr. Hudson says, but he finds it necessary, in giving complete service, to be able to supply fuel as well as lubricants. His sales of diesel lubricating oil run from one to several drums with one order, considerably more than could be expected on one order of automotive motor oil. Salesmen's cars carry a neat sign on the side of the door, "Marine Oil Co., Engineering Department", which Mr. Hudson says helps to get over to customers the fact that the salesmen are properly qualified to discuss the mechanical problems of lubrication.

The ammonia for use in the refrigerating systems, he has also found to be a profitable item. He handles this entirely on consignment for the manufacturer, and supplies are received in 50-pound, 100-pound and 150-pound cylinders, and stored, at his bulk plant, on a platform with open sides. Companies using this product in their refrigerating systems generally order enough of the cylinders to run them through a season, he states, and then the Marine Oil Co. gathers up the empty cylinders and ships them back to the supply house.

Like many other independent jobbers, Mr. Hudson has found tires a profitable line of merchandise for an oil marketer to handle. He secured the wholesale agency for a line and his salesmen, who are out in the territory selling his

Training the atoms

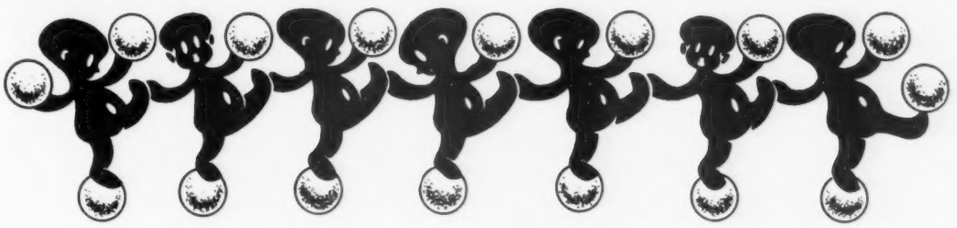


Here is a black carbon atom with four white hydrogen atoms Together they form a hydrocarbon molecule

Gasoline is made up of hydrocarbon molecules

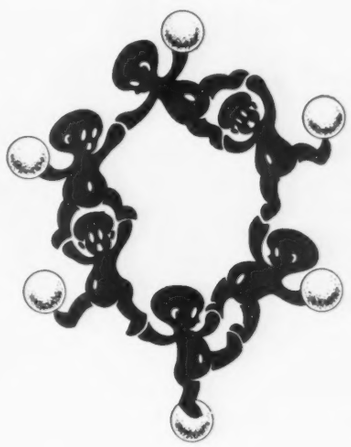
How good the gasoline is depends on how the atoms are arranged and trained

Here's heptane—C_7H_{16}—prominent in straight-run gasoline Atoms arranged by Nature—octane number zero



At the right below is benzol, C_6H_6—an anti-knock molecule—atoms arranged by Dubbscracking

Dubbscracking assembles the atoms in the oil into various anti-knock molecules, including those of the benzol series



That's why Dubbscracked gasoline gives the motorist more knock-free miles for his money

Universal Oil Products Co
Chicago, Illinois

Dubbs Cracking Process
Owner and Licensor

motor oils and diesel lubricants and fuel, handle tires. He carries a large stock of eight to ten sizes and receives a discount for warehousing the entire stock, which he says he handles without additional expense at his bulk plant and also at the one service station his company owns and operates. This station is located at the same site as the company's headquarters on St. Charles St., a principal thoroughfare not far from downtown New Orleans. The few other service stations the company owned Mr. Hudson said he sold some years ago when he realized that gasoline stations on the whole must operate on a small volume of business and also a smaller margin on their sales.

This one service station, however, sells at the posted price, although within a few blocks around are stations with cut price signs and it has a gallonage of 15,000 a month, Mr. Hudson says. This station also sells about $3600 worth of tires a month through three merchandising plans the company has adopted in retailing tires.

First, the man in charge of the station puts his attention on selling tires, not gasoline. When a car drives into the station, the operator first sizes up the condition of the rubber on the car. As he cleans the windshield on the driver's side, while another man is putting gasoline in the tank, he suggests to the motorist, if he has found a bad tire, that the tire be removed and examined for spots that may cause trouble later, explaining that this is a free service the station offers.

IF the customer will spare the time and the car, all the tires are removed by the station crew right then and checked over for nails or cuts and the inside of the rim is painted to keep it from rusting. In the meantime, the car's license number has been sent into the oil company's office and the owner is noted and his credit rating checked. If the credit rating is approved, the station tries to sell him the one or more new tires needed, offering him 30 to 60 days time to pay for them. If the gasoline customer cannot take the time right then to have his tires removed and checked, the station tries to make an appointment for him to come in later and take advantage of this free service.

Second, when a tire is sold, the old one removed is tagged with the owner's name and he is told it will be held at the station for a few weeks and that maybe he has a friend or can himself find some one to buy the old tire and if so he is to be sent to the station. If the owner can't sell it or does not try to sell it, he is not likely to argue over the allowance the oil company will make him on the tire.

Third, the oil company gives free road service, in the city only, for purchasers of its tires. It maintains two light cars, equipped with an air cylinder and the equipment for changing tires. The company makes the regular charge for the repair service and, for any call outside the city, a charge is made for the road service. Seven or eight service calls are averaged a day during the summer, the station reports.

When gasoline stations around New Orleans began to sell to the public at under their posted prices, Mr. Hudson figured out a unique plan which allows him to offer a discount to a certain class of trade but to draw a hard and fast line there and which also involves the sale of a tidy volume of motor oil. He went to selected stores and industrial concerns where a number of people were employed and told their proprietors that, if enough of the employes would come in on the plan, he would sell them gasoline at two cents off at his one station—provided that each person would also buy a five-gallon can of his motor oil at his regular price for a sale of this quantity.

The individual is billed for the oil at the address where he works and the oil is stored at the station in a special five-gallon container with the name tagged on it and used as the purchaser calls for it. There are no markings on the can itself and the cans are re-used in this service. The customers have to be in on a group sales arrangement and they have to come to this one station for their motor oil and gasoline both.

The Marine Oil Company has also figured out a plan to meet the competition of the cut rate automotive accessary stores, of which there are several in the vicinity of its service station. When a customer asks the price of light bulbs, ar a fan belt or spark plugs, the station quotes a price as low as that of the cut rate store and then adds that, if the installation is made at the station, there will be a service charge of whatever amount is necessary to bring the price to the full listed figure; sometimes the price, including the installation, is even higher. Customers are told that, if they buy at the automotive supply store, they either have to install the item themselves or pay a garage man for doing it and that the service station's price includes also the installation charge.

How ammonia cylinders are stored at the bulk plant of the Marine Oil Co. in New Orleans. This product in cylinders, handled on consignment from the manufacturer, is a profitable item sold to refrigerating plants, along with the fuel and lubricants for the diesel engines which operate the plants in many cases

THIS station sells 35-cent motor oil by showing the customer what a small amount is actually spent for proper lubrication of his automobile, when he uses premium oil, and telling him what a repair bill can amount to if its lubrication is neglected. It gets $1 for lubrication jobs, while some nearby stations sell a grease and wash job both for that figure, by showing that the work is done by men who know how to lubricate a car thoroughly.

In front of the service station, under the company's name, are the words, "Wholesale and Retail". "I want people who stop at the station to know that we are also in the wholesale oil business," said Mr. Hudson, "and I don't know any other way to tell them that fact plainly. Sometimes people who are retail customers for gasoline or motor oil turn out to be wholesale customers for something alse we have to sell."

Mr. Hudson started his business as a stock company, his larger customers being his stockholders, the provision being that, as they retired from business, he was to have the option to buy in their stock. This was back in 1902 and now he is virtually the entire owner of the business. He has taken an active part in civic affairs in New Orleans and was the head of its port commission at one time. At noon now, on certain days of the week, he puts on his hat and goes down the street to a director's meeting in a magnificent modern building, the white masonry of its upper stories standing out vividly against the blue of New Orleans sky; and he will tell you that he helped to organize that bank, along with a group of other men who had faith in the future of their city and that part of the South.

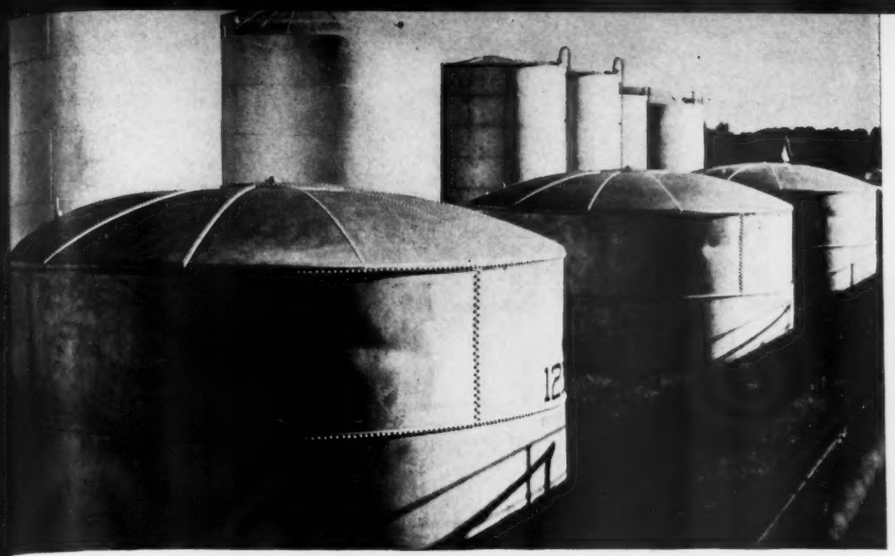
Driving Time Shown On New A A A Map

WASHINGTON—Hours are more important than miles to the motorist on vacation, so the American Automobile Association has issued a new mileage chart of the U. S. which, in addition to giving the mileage between important points also gives the approximate driving time.

Announcing the new chart, A. A. A. said it is "reflective of a changed attitude on the part of the traveling public."

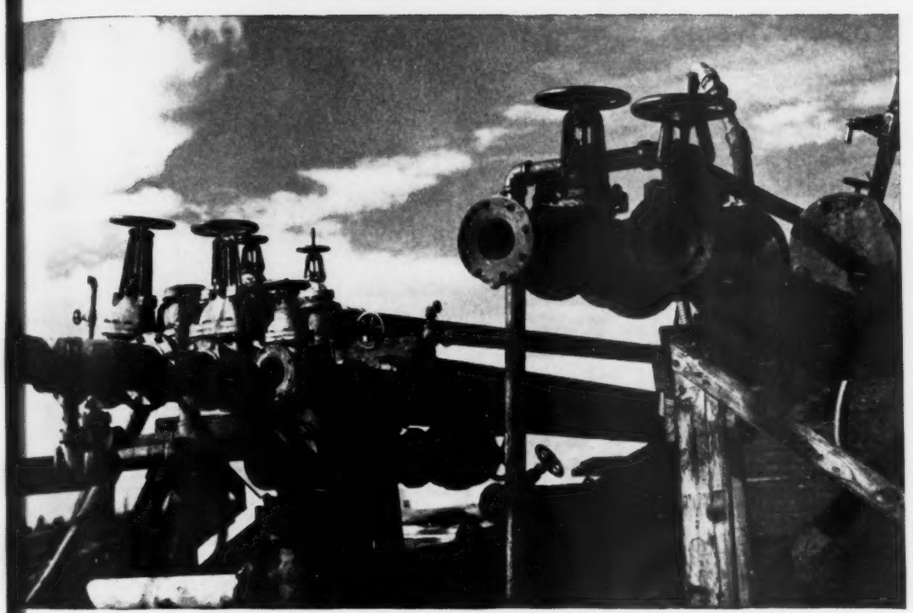
`Now, instead of considering "how far" a vacation spot is, the A. A. A. feels the average tourist wants to know, "how long will it take me to get there."

The average driving speeds shown on the chart were prepared with all factors, "such as speed laws, road conditions, congestion, and so on, taken into consideration, and are based on driving times as reported by our fleet of scout cars now covering the nation's highways," says the A. A. A.



STORAGE

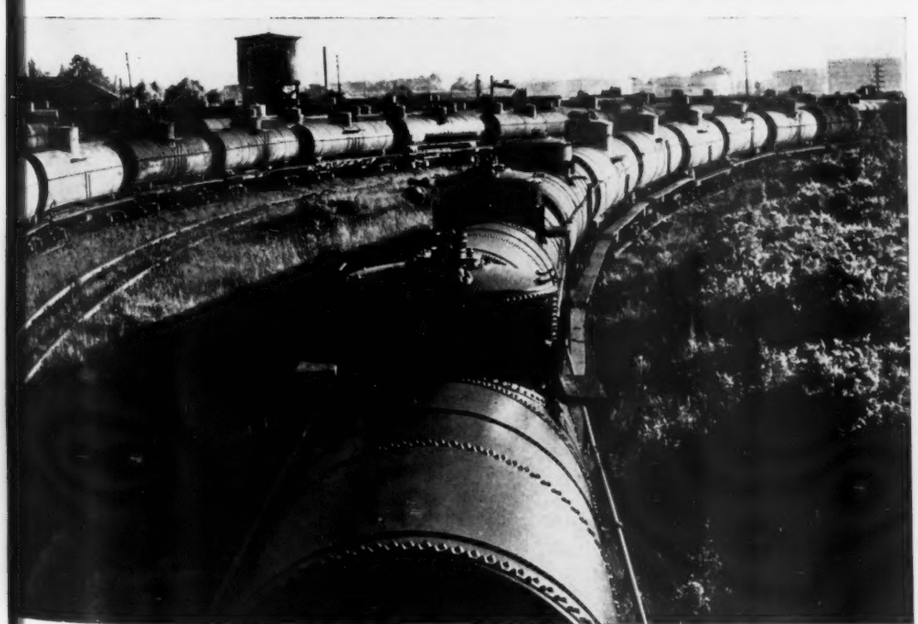
Anything that flows through a pipe line is best stored at General American. You can accumulate cargoes by the single carload or in train loads. You can lease tanks for a single shipment—or for a year. You can use small two hundred barrel tanks, or the big fellows of 80,000 barrels. Your exact requirements are met in the most efficient way.



SAFETY

The separate lines shown here guard your product from contamination.

Low insurance costs at our terminals are proof of extra savings. Here you have all-steel tanks—finest scientific safety appliances—complete fire protection—minimum evaporation loss.



SPEED

They say, "General American are specialists in speed." Solid trains are dispatched at all hours. Ships are quickly cleared. It is speed, with careful handling, that means extra savings.

"Strategically located GATX GENERAL *to serve you"*

GENERAL AMERICAN TANK STORAGE TERMINALS

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Carteret, N. J. (Port of New York)
Galena Park, Tex. (Port of Houston)
Corpus Christi, Texas

SUMMER PROFITS ... FOR TH

Still more new ways to increase Summer Profits are being reported to NATIONAL PETROLEUM NEWS by Independent jobbers over the country. They include:

WHAT THEY SELL—Items added to jobbers' lines are range burners, hot showers for tourists, insecticides for summer campers and fishermen, snack lunches, soft drinks, candy, cigarets.

ADVERTISING—Jobbers using their own ideas in advertising and sales letters. Concentrating their advertising in most profitable trade areas. Greeting customers themselves from the pump island.

NEW EQUIPMENT—Computer pumps are found to cut gasoline losses and increase sales at stations. Larger capacity pumps and meters cut bulk plant operating costs. Pumps and meters on trucks expedite truck deliveries.

CONSTRUCTION AND MODERNIZATION—New service stations are being built and old ones modernized. Trailer camps laid out, tourist cabins built. Approaches improved at stations, walks laid to rest room entrances.

Below are other ways in which oil marketers are making the most in profits out of the year's biggest gasoline business, now in full swing and more ideas will be given in the next issue of NPN.

Finds His Own "Uncanned" Advertising Pulls Better

Some of its own home written ideas have been getting business results for the Pyramid Oil Co., Colby, Kans., a major brand marketer when coupled with ideas of the supplier's national advertising.

For example, one such home written ad ran in a Colby newspaper a few days before the Fourth, announcing the company's five-day tire sale. A half page in size, this ad dominated the paper with its one-inch, boldface-lettered head and the word, "SPECIAL" in all caps set diagonally across one corner for attention value.

"This . . . ad", says M. A. Taylor, assistant manager, "has met competition in the tire business . . . and it is of our own writing. It got results."

"While we do not sell as much tire merchandise as does our 100 per cent competition, we are not far behind," he added.

The Pyramid company uses both direct mail and newspaper advertising weekly. It increases this advertising during the summer.

"We feel", Mr. Taylor continues, "that the direct mail does us more good, for it is directed in most cases to customers who are not our regular patrons and to people who are not familiar with the high type of service that we render.

"We are able to couple our advertising program (with the supplier's), which we feel is advantageous to us. Naturally, the advertising material used is of well-worked out type, designed to get whatever good results can be obtained. . . . We hook to this . . . some of our own uncanned ideas which, we feel, has even more effect and some increasing beneficial results."

One piece of direct mail used by the company and furnished by its supplier is patterned after an old-time proclamation, set in old style type on what looks like brown parchment. "Give eye, give ear, to this Proclamation", the piece beckons. "It is a proclamation of new and better values for *You*." It goes on to tell of the products and services available at this company's station.

Another direct mail folder has a sky-blue cover sprinkled with white stars. It asks provocatively: "Mr. (customer's name), do you know which Star to follow?" Upon opening the folder the star is shown leading to the station's pumps.

A blotter recommends chassis lubrication every 1000 miles and changing motor oil at regular intervals.

The company is proud of its 14,000 per month gasoline gallonage in a town of 2600 people. Its complete service station is open 24 hours a day.

* * *

Dealer Sales Letter Is Found Helpful

A monthly sales letter, to build good will among his dealers and convince them he is trying to help them increase their business, is being sent regularly by C. W. Lepsch, owner of Wm. Lepsch & Co., Hornell, N. Y., who succeeded his father upon the latter's death in May.

These letters cover semi-technical oil problems, sales ideas, interesting stunts, or bits of news. For instance, when the new S.A.E. specifications for gear lubricants went into effect July 1, Mr. Lepsch devoted his June letter to this subject, explaining how these changes affected the 'lubes' his dealers sold. In another letter he enclosed a copy of a 51-year old invoice from his present refinery source to a customer who is still trading with the same supplier.

* * *

Presents Bouquets To His Customers

Getting the personal touch into business by making the customer feel he is being given more than ordinary business routine, is proving a repeat-business getter and advertising help to the Harwood Service Station, Rochester, Minn.

Customers are given a bouquet of flowers grown in the station gardens or they are promised seeds, plants or bulbs if they wish them.

"As we are located on a highway in

a rural district", explained O. J. Harwood, proprietor, "and have an acre of ground for a flower garden, we hit upon the idea of giving a bouquet with each reasonable purchase.

"As we have living quarters at our stations, Mrs. Harwod is here at all times and invites the ladies to inspect the garden and gather what flowers they care for.

"If the customer is especially interested in any particular item, we offer to save seeds or plants or bulbs, if they will stop later for them. We get the name and address so that we may follow up these contacts.

"We tried out this plan in a small way last season and were surprised at the repeat business and advertising it brought.

"We believe", Mr. Harwood continues, "that the main point in this idea is getting in a personal touch with each customer and not make it appear as simply a routine matter, like giving a glass or dish with each purchase."

* * *

Sells Candy, Soft Drinks

Candy, cigarets, pop and other soft drinks, and a nickel soft-drink dispenser cooler, have been added as summer items by Lomas Oil Co., Bismarck, N. D., says W. P. Lomas.

The company has also purchased a three-quarter ton pickup truck and has added sleeping bunks for transport and truck drivers.

* * *

Oil Burners Added To Jobber's Line

Above-ground storage tanks of 120 and 200-gallon capacity are being used for farm trade and small commercial accounts, by Pennypacker Oil Corp., Lockport, N. Y., according to W. G. Pennypacker.

The company is also soliciting marine business, Lockport being on the Barge Canal in Niagara county.

New accessories being offered by the company are oil burners for furnace and range. It has installed new metering equipment on its tank truck, and has bought two new trucks, one a 1½-ton and the other a transport truck of 4000 gallons capacity.

One controlled service station is being built.

Hot Showers Make $40 A Month Profit

R. R. Boston, Independent marketer of Centralia, Ill., is operating five tourist cabins at "practically 100 per cent occupancy", he says.

"Our hot showers bring us a net of $40 to $50 per month, at 10 cents per shower," he adds.

Mr. Boston leases two 19,000-gallon storage tanks at his bulk plant to a competitor "for enough to pay operating and maintenance cost on entire plant", he says. He also rents a truck to competitors for enough to cover its cost of operation.

Mr. Boston is as yet undecided on opening a parking lot, on buying a new truck and building new service stations. He said he "may try a beverage distributor".

* * *

Widens Approach To His Station

In order that motorists may see his station in time to stop, Paul Peterson, proprietor of the Blackwell Hill Service Station, Central Point, Ore., has widened his driveway "by cutting down many feet of high bank along the highway on both sides of the station, so there is now a clear view from both directions."

"A fine, new, up-to-date rest room, garden pool, and flower gardens come into this view", he adds.

"In order to increase profits one has to have customers, so I am trying to make my station so attractive, more cars will drive in," he concludes.

His station is open from 5 a.m. to 9 p.m.

* * *

Improved Greasing Facilities Brings in More Business

Modernizing its stations, adding improved facilities, and making greater sales efforts, has been part of the better-business program of Paramount-Pingree Oil Co., Salt Lake City. The company operates nine bulk plants in Utah.

Oil sales showed "an excellent increase" the first five months of this year over the same period last year, A. H. Ehler, president, reports.

"This is due to a concentrated selling effort on the part of every service station lessee", he says, "pursuant to our special training.

"We train our dealers to work all the territory surrounding their stations thoroughly", he adds, "even to making a house-to-house canvass each month.

"We are improving our stations constantly", he continues, "adding wash and grease rooms and better lubrication facilities, so that our stations are not only the most attractive in their particular vicinity, but offer the utmost in automotive service to customers."

More efficient route-planning for trucks enabled the company to eliminate one truck. Mr. Ehler says, "just because firms have had four or five trucks in operation for several years, it is hard to believe that they can get along with less. However we found that we could eliminate one unit through more efficient route-planning.

"We also discovered it was possbile to build a combination tank wagon and stake truck. At the time gasoline is delivered, crankcase drainings can be picked up at the service station on the same truck. This operation also eliminates one truck."

The company has purchased two new 1½-ton trucks the past six months. "We find it more economical and profitable", Mr. Ehler reports, "to operate these new trucks than trucks which are four or five years old."

Five new and modern service stations were recently leased by the company. These have wash and grease facilities.

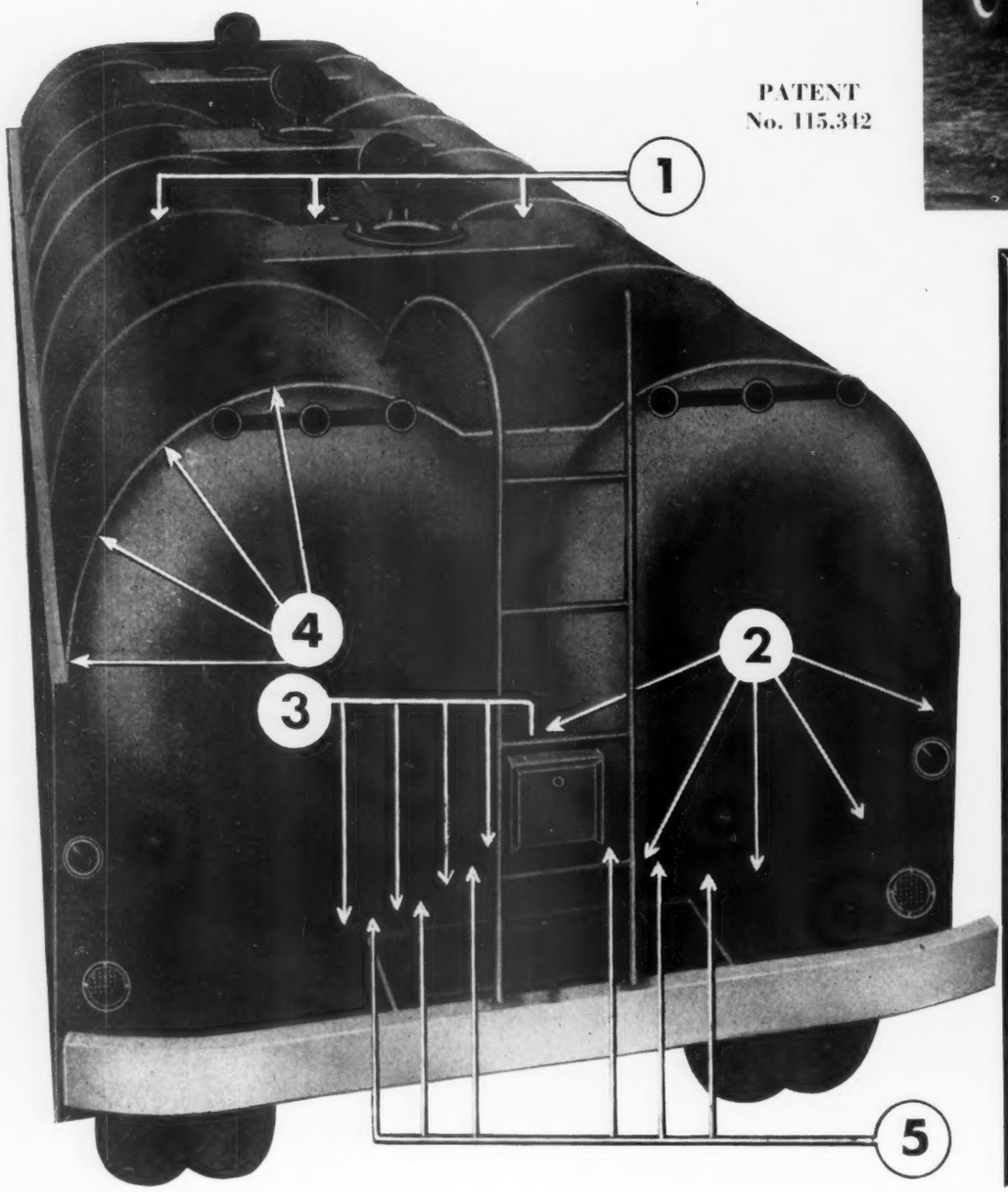
New service station of Paramount-Pingree Oil Co., at Logan, Utah, leased by Oliver Otte

Another Oil Transporter Has 4 Sets Of TWINS

PETROLEUM CARRIER CORPORATION ADDS 4 SETS OF BUTLER TWIN-TANKS TO LARGE FLEET OF TRANSPORTS

One of the major gasoline transporters in the Southeastern area is the Petroleum Carrier Corporation, Jacksonville, Florida. Operating a large fleet of transports from water terminals, this company is very much alive to the weight savings with safety which only Butler Twin-Tank Safety Transports can give them. Shown here are 4 "Sets of Twins" recently added to an already large fleet.

PATENT
No. 115,342



Compared To A Conventional Oval Tank Of Same Height And Width:

1. Butler Twin-Tank strength as a beam gives a 20 to 1 factor of safety.
2. Butler Twin-Tank hopper or liquid carrying strength is 3¼ times greater.
3. Butler Twin-Tank shear strength is twice greater.
4. The short radii of Butler Twin-Tank shape virtually eliminates vibration and reduces possibility of cracking.
5. Butler Twin-Tank bottom strength or strength over the integral frame (most vital section of any tank) is 8 times greater.
6. Spillage on Butler Twin-Tanks is drained out of the depressed walkway at rear. This reduces fire hazard—protects tank finish.
7. Butler Twin-Tank capacity is ½ gal. per inch of length greater.

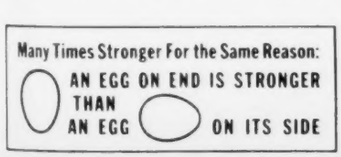
BIG SWING to Greater Safety thru GREATER STRENGTH and MAXIMUM PAYLOAD SWEEPS ON!

Safer, yet lower cost transportation is the reason. On the one hand profitable operation calls for weight saving in transport units to increase payload. On the other hand tightening regulations demand greater safety.

Even before these opposing problems began to get acute Butler engineers had them solved with a revolutionary transport design. It is a design that increases safety at all vital points while actually stepping up capacity. Actually, the two shapes in Butler Twin-Tanks increase beam strength until it is 20 times as great as needed to carry the combined weight of tank and full load. At the same time the short top and bottom radii of two tanks, instead of a long radius in a single shape, cuts down liquid load surge and vibration. Two bottoms, instead of one, distribute liquid load over a greater load bearing area and increase hopper strength 3¼ times over single flat oval design. The most common section of failure is a tank's bottom. Here, where it is vital, Butler Twin-Tanks have 8 times greater critical bottom strength.

Like every great advancement Butler Twin-Tank design is simplicity itself. Each "twin" is a stronger shape and stands the strong way. Prove the extra strength inherent in Butler Twin-Tanks to your own satisfaction. Crush an egg placed flatwise between the palms of your hands. Then, see how much harder it is to crush an egg placed endwise between palms.

Before you buy any gasoline transport call upon Butler engineers to show you in detail how Butler Twin-Tank Safety Transports protect you while giving you longer, lower cost transportation.



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Twin-Tank
SAFETY TRANSPORTS

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Send complete information on Butler Twin-Tank Safety Transport of ..... gallons capacity.

Firm name .....

Address .....

City ..... State .....

16 Factors That Hit Every Marketer's Prices

Analysis of Causes of Low Prices Today; But to Some They are Reasons for Profitable Prices

By Warren C. Platt, *Editor*

IT IS only human nature for man to see and understand the nearby things that immediately disturb and hurt him, and particularly those for which he thinks he can say that he is not responsible.

Therefore, we hear much in business about price cutting and other alleged bad business practices that have occurred right close by and that have always been perpetrated by "the competition." If the price cutting or alleged business misconduct by the competitor is important enough to occupy much conversation, then those nearby acts are taken to the exclusion of all else that may be happening just over the individual's nearby horizon line, as sufficient explanation of each individual's difficulties.

Most everywhere you go in the oil industry you find this true.

In oil marketing the Independent jobber will tell you with much vehemence and detail of alleged cut prices and bad practices of his "great competitor." You call on the representatives of the "great competitor" and they will charge similar misconduct on the part of the jobber and oftentimes offer a file of "evidence" in support of their statements.

So, in trying to find out what is wrong in oil marketing, you generally do not get much further than the "unethical competitor" around the corner.

Today, if the jobber or major marketing representative, would see himself and his troubles—if any—clearly, he must look past the alleged misconduct of his competitor and view almost a score of factors that are at work to increase the keeness and severity of his competition and hence work to reduce his price, his margin and his profits.

The following 16 factors are among the many that have worked, adversely to some but profitably to others. These factors are not especially new. They have been coming into existence and gaining in prominence for the past several years. All of them have been reported time and again in the pages of NATIONAL PETROLEUM NEWS. However, judging from the way many men in oil marketing talk, these points are probably still pretty much "news."

1—The Crude Oil Situation.—

New fields in Illinois, right in the heart of a big consuming area, have developed in 2 years more than 200,000 barrels a day of production which has been thrown on the market at all sorts of prices and regardless of sound engineering conservation, because Illinois has no conservation or "proration" law.

Illinois backed up onto the older fields of the Mid-Continent the same amount of crude oil, quite a bit of which has been sold at cut prices, which in turn means cut gasoline prices.

The Michigan fields are taking some of the consuming market which otherwise would have been enjoyed by the producers of the Mid-Continent, making the latter still more restive with their smaller sales, often at cut prices.

New production along Louisiana's and Texas' Gulf coast particularly is continuing to develop a big refining industry there which is pushing into existing markets here and there, try-

Where is the Bottom of Prices Today?

As you read this article of the 16 factors that affect your prices, one should keep in mind that many of these factors are increasing profits for some marketers while making losses for others.

One should also keep in mind that larger companies, when they have tried to get necessary—to them—higher prices in some local markets even over considerable area, have found their gallonage drifting away. The longer they hold to the higher prices in these instances the more their gallonage shrinks.

Why?

Somewhere among these 16 points probably is the answer, or maybe there are additional important points.

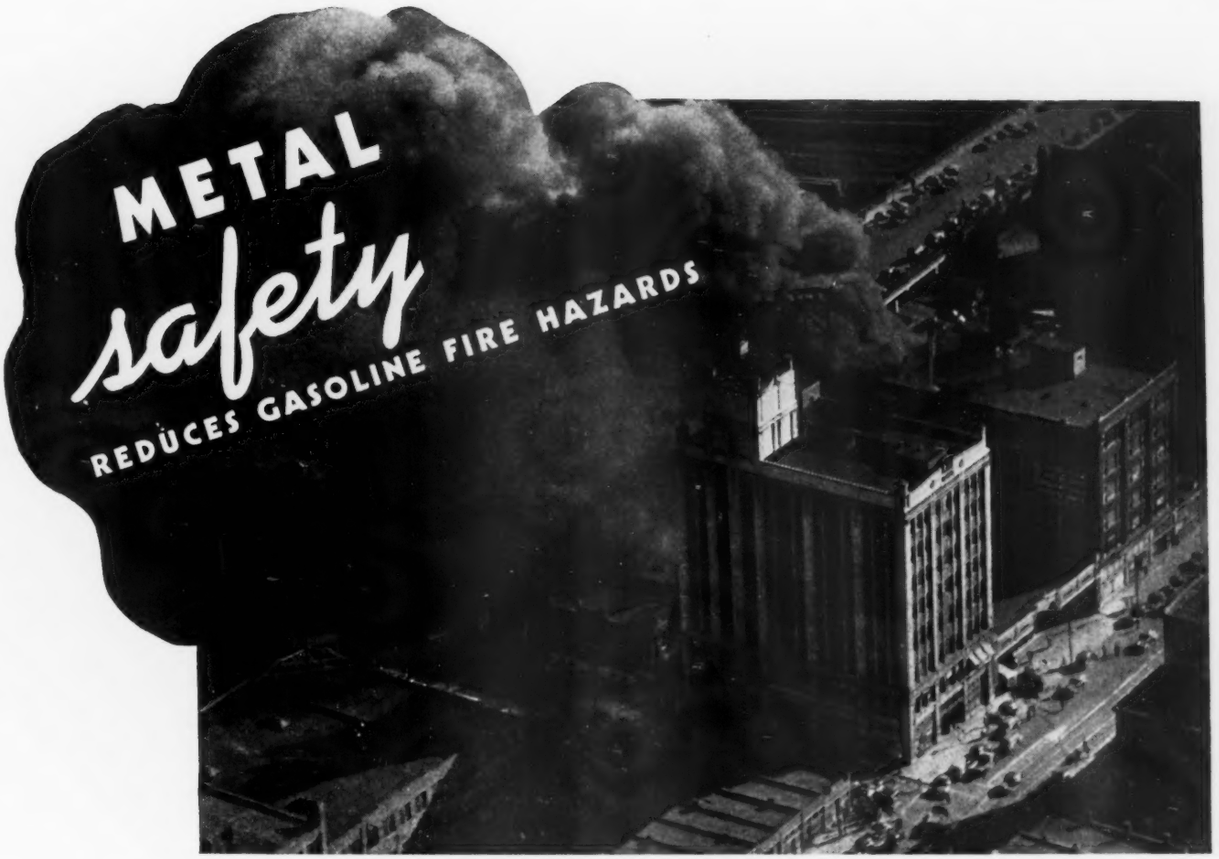
Somewhere and somehow somebody is presumably making a profit at the lower prices.

How are they doing it?

Is it better equipment? Better location of source of supply? Better management?

Ask yourself these questions as you read this article.

Editor.



. . . that's one reason why leading authorities recommend Flexible ALL METAL or METAL LINED Hose for handling flammable liquids.

•

"All hose used in unloading should be metal lined, and all connections and fittings should be tight".

— Quoted from FACTORY MUTUAL RECORD, December, 1938. Publication of Associated Factory Mutual Fire Insurance Companies.

Four buildings were destroyed and two others damaged as the result of the general alarm fire shown above which started when gasoline that was being unloaded from a tank car became ignited, burned through the unloading hose and released a 2 inch stream of gasoline which could not be stopped until the entire car emptied.

This fire points out very clearly the necessity of using fire resistant Flexible METAL LINED or ALL METAL Hose in tank car unloading and in similar cases, such as in oil burner connections, where fire hazards exist. Leading fire prevention authorities recommend Flexible ALL METAL or METAL LINED Hose for such uses because these types of hose will not burn through.

In addition to this important safety feature, Flexible METAL LINED or ALL METAL Hose provides positive metal to metal contact which greatly reduces any fire hazard due to static electricity.

Write for your copy of the "FACT BOOK". It's packed full of useful information on the many applications where Flexible ALL METAL and METAL LINED Hose can cut costs as well as eliminate hazards.

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ing to get a share of the business without unduly disturbing prices.

2—Transportation,—

BY WATER—Continued great development of petroleum products moving by tanker and barge, owned by major company and small company and Independent jobbers. As new water ways are opened up to navigation each year and as all refiners and all marketers do not see or cannot avail themselves of these new facilities at a given moment, the result is the newer low cost transportation makes for ragged prices, generally called "cut prices", though they may be entirely profitable prices, by which a particular marketer is trying to increase his volume of business beyond the natural percentage of growth of "his market."

BY TRUCK AND TRUCK TRANSPORT—These are not only reducing materially the hauling cost but their flexibility permits a marketer to invade new territory and at a saving in cost.

BY GASOLINE PIPE LINES—These so far have probably not created lower markets so much as they have served to hold existing markets for various refiners and refining groups that otherwise would have had to drop out of their old territories against the competition of water transportation, crude oil pipe lines, truck transport and "price selling" at trackside stations. For illustration, the refiners in the Great Lakes Pipe Line would have had either to have found some other cheap way to move their gasoline north, or else would have had to have dropped out of that vast northern market just as the smaller and "unbranded" Mid-Continent refiners have done. Whatever the reason, the net result is that the gasoline pipe lines have increased the competition for existing business.

3—Direct Deliveries,—

TO CONSUMERS—By reason of the requirements of many consumers getting larger, there has been a steady growth in direct deliveries from refinery or marine or pipe line terminal to those consumers.

TO SERVICE STATIONS—Because of the continued great growth of gasoline consumption per square 100 miles, say, and for other reasons later noted, more and more service stations in the larger consuming areas have built up a gallonage permitting them to receive gasoline in tank car and in truck transport. As their volume of business in many cases is greater than that of most western jobbers, these stations have therefore commanded better prices, including tank car prices.

4—Better Merchandising and Management,—

National gasoline brands with their accompanying sales and managing advice and service, have greatly widened the gulf between the good and the poor stations. These national brand owners and their distributors are not only greatly increasing the efficiency of their operations and training their distributors to be better managers and sellers, but are always erecting the very latest in modern type stations and equipment. They are not leaving their merchandising system nor its development to the independently owned retail station operator who has little or no money nor generally any managing ability. The result is more business is being attracted to the newer type company owned stations and away from the poorer type, thus lowering the per-gallon operating cost of the former and raising the cost per gallon for the poor type station.

5—"Price Sellers"—Trackside Operators,—

The quality and efficiency of stations and management, and also products, of the "trackside" stations have much improved in the last few years. Chains of these stations that sell on price, are as well, if not in many cases much better, managed than at least most of those handling national brands. Many of these chains with their more direct management and more rigid adherence to style and pattern, have placed a glamour about their businesses that has done much to remove the old stigma of being a "price cutter", a phrase that generally meant a dilapidated, run-down and dirty station and poor management. Over a wide area of this country, and particularly in the large gallonage sections, a price selling station does not look like, nor mean, a shanty with an old rusty pump, stuck on a junk heap.

6—Ethyl Brand Aids Price Sellers,—

As the sale at refineries of Ethyl brand gasolines has became more general in the past several years, more and more price sellers have bought Ethyl gasolines in the open market. First they got "regular" grade "leaded" and of late they have bought and are selling "Ethyl Premium" grade. This especially since the federal court's decision a few months ago that the Ethyl Gasoline Corp. could not include retail prices in its restrictions. Many price sellers now push Ethyl premium gasoline at their own reduced prices and their own differential over "regular". They play the Ethyl emblem up at their stations. The result is this is the first time those who sell on price and do not have a national gasoline brand have had the assistance of a national advertising campaign on which millions for many years have been spent. For the moment the price sellers seem to be able to conduct their sales without maintaining as great a differential under their competitors "normal" prices as in the past.

7—The Sales Power of Clean Toilets,—

For the tourist and many other drivers, clean toilets, or stations that look as if their toilets might be clean, have a growing pulling power for station business. A very large number of station operators do not seem to realize that the public is being educated to higher and cleaner sanitary standards by all kinds of advertisers and magazines. Nor do these operators realize that the "last" gallon of gasoline will run the average car for 15 or 20 miles, which is enough to survey several several dozen stations in a town from which to pick the one that seems to have the cleanest and best toilet facilities.

From comment heard one can easily believe that many of the traveling public are not so much concerned as to the quality of gasoline that an advertised national brand denotes, but accept it for the kind and character of toilet facilities that may be found under that brand. The desire of the public for cleaner toilets and the fact that the exterior appearance of a station is at least an indication of the character of the toilet within, is widening still more the gulf between the good and the poor station, and sending more gallonage to the former and taking it away from the poorer stations, thus increasing the latter's operating costs still more.

8—The Battle of the Small Refiner,—

Since the price paid by jobbers for so much of the country's branded gasolines is based on and, in fact is, the price of unbranded gasolines sold by the Independent refiner to private brand jobbers, the national advertising and special merchandising service given with the branded gasoline has proved a handicap to the small refiner. As the small refiner's private brand jobber customers compete with the national brands by supplying their own advertising or else sell on a price differential below the regular retail prices, the effect of this contract set-up has been to drive the small refiner's price steadily downward.

This has made the small refiner's position so unprofitable that many have quit and others have turned to other means of distribution, either establishing their own outlets close at home or seeking price sellers. The small Independent refiner has long realized that the jobbers who have taken on national brands have in fact turned against the Independent refiner, so the battle today is one for existence of the Independent refiner and his private brand jobber versus the national brand jobber and the latter's major source of supply.

9—The "Iowa Plan",—

When so many of the oil companies leased most of their stations to their dealers starting in the summer of 1935, they turned over to men utterly untrained for the responsibility, the job of setting and maintaining the industry's retail prices on gasoline, motor oil and station services. In the intervening four years many of those old

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station men who had been trained in oil company organizations, have gone out of the picture and the newcomers are without such direct company training. The result has been continuing chaos.

These station lessees, like practically all small business men, know only how to sell on price. Their trend has been to reduce price rather than to raise it. Price has not only deteriorated but so has station appearance and the quality of station service. Today oil companies are beginning to take back at least some of their key stations. It is generally easy to spot a direct company operated station, even as against dealer stations of the same company, because of the noticeable difference in station appearance, service and in the men themselves. The retail price making of the oil industry today is in the hands of some 400,000 individual operators who by their very number are unable to act on prices as a unit except downward.

10—Unemployment of Men,—

The 10 years of depression and its 10 million unemployed has sent men of all abilities to all sorts of fields of possible employment. As most people look on "storekeeping" as a relatively simple operation, even one requiring little work, it was but natural than men turned to running service stations as being a business that required no special training. Service stations have been continued in operation and new ones have been established, because men preferred to work in them at low wages even down to and below the prevailing WPA wage.

While the oil industry is to be commended for thus providing a means of livelihood for probably a good many tons of thousands of men, the effect on the industry has not been conducive to good prices and fair profits. Gallonage has been spread thinner and thinner each year and costs at the stations if figured on a good living wage, have gone up. Were the industry to raise prices—if it could—so as to make operation of all stations today "profitable" in the opinion of all their operators, there would certainly be such a new influx of men from WPA and elsewhere, manning new stations, that prices would have to go up again and again until the whole WPA was running service stations. And it is these men who today, under the "Iowa plan", have the sole power to raise retail prices in most territories.

11—Unemployment of Real Estate, Due to the automobile itself largely,—

As better cars and better roads have made it easier to travel more miles more quickly, the population of the country has been spreading out over more land.

This has sent people away from the centers of congested living and working, with the result that there is much idle real estate in down-town city areas. Old business buildings, even ten-story ones, are no longer profitable and are being torn down for parking lots and service stations. Old residences are being abandoned and effort is made to install some commercial use of the property, generally a filling station. The result is more service stations, many erected by the frantic property owner trying to get some revenue to pay interest and taxes. Others erected by oil companies who find good locations at now fairly reasonable prices. These stations, manned partly at least by the men thrown on the market by our depression, are almost invariably serious price hazards. In fact many such stations are built to sell on only price because of their central location.

12—Greater employment of Real Estate, Due to the Automobile Itself,—

As the automobile has flattened out cities and moved their population further and further into the country onto larger pieces of property per individual and hence per automobile, new areas have been opened up for the installation of new service stations. At the same time it has not always been desirable to tear down the stations in the older portions because men are to be had who are willing to work for down to WPA wages who will keep the old investment from being a heavy loss.

What the limit will be to their spreading out of city population it is impossible to say, but it is conceivable that it will continue to the extent of creating new manufacturing and business communities around which will be grouped business men and workers living on at least small acreage and, as Henry Ford is reported believing, being at least to some extent self-sustaining as to food. While car owners living in this way will be willing to travel a few miles to buy their gasoline, they will be met on the road by the man who is willing to sell a relatively small volume for enough to live on, especially as he may have his own truck garden right there to eat from. He will also sell other merchandise. How that will affect gasoline marketing only time can tell.

13—New Motor Traffic Routes,—

Contributing to the spreading out of the population are the new motor traffic routes. Their construction leaves some stations in an unfavorable or even ruinous gallonage location. They generally create new station locations. However they shoot the motorists along at such a rate and for such a long time that his stops are regulated more by the needs of nature than by the needs of his engine. In and around large cities new routes and new bridges are being constantly cut and erected, to the loss of many old service stations.

In the smaller cities and towns through routes are being constructed around the towns entirely or at least away from the old down-town congestion, which again presents service station problems.

All stations whose business is affected by any such improvements are some kind of a price hazard, for their owners and operators must decide whether to close them up entirely or try and struggle along on a WPA wage and gallonage level. And always with the construction of such important new routes where considerable traffic becomes concentrated, come the price selling station operators who may put up fine looking and efficient stations at key places where most of the traffic can be stopped, which greatly extends the influence of their low prices upon and down the highway.

14—Zoning Laws that Limit Stations,—

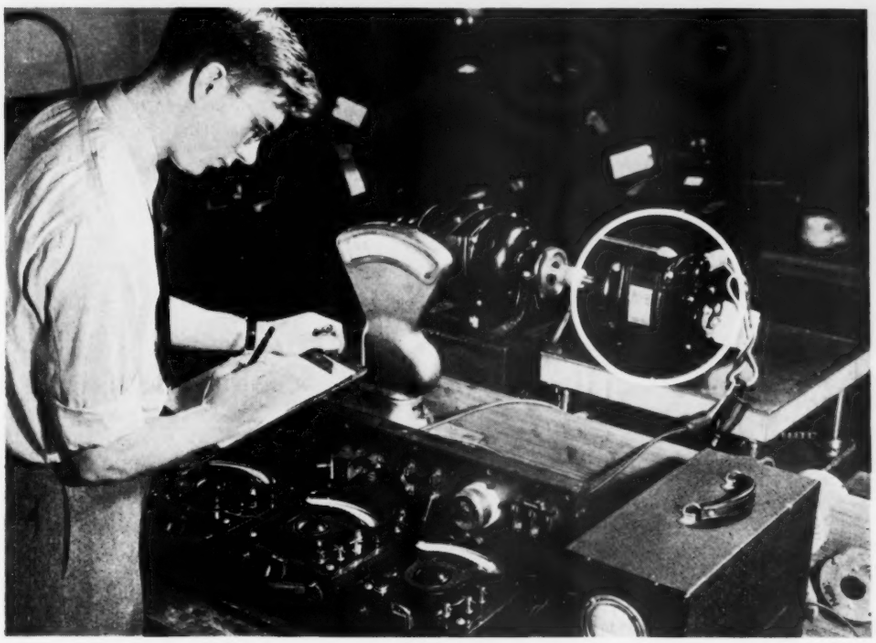
More and more owners of good residential property are getting laws to permit them to protect their use of that property. Practically all fair to good residential districts today are generally protected to some degree by zoning laws. Undoubtedly new residential areas will be absolutely protected, so that there will not be any unrestricted or unguarded pieces of property in such an area where a commercial enterprise can slip in or a "hi-jacker" hold up the other property owners of the community.

Today these zoning districts have forced stations to group themselves on their borders and in the unrestricted streets, and thus in putting the stations even side-by-side, these laws have made the stations appear all the more numerous and all the more competitive. A cut price sign can be seen in these districts by many customers of all stations. Also a clean, high class looking station, that probably has a good toilet, can be easily picked out. There can be no question but that zoning has increased the keenness of competition between stations and between "regular" price stations and "price selling" stations.

Down in the old districts, where residences are being abandoned and there isn't any zoning, the service stations built to serve the affluence of the past, are left to battle for a decreasing number of cars and oftentimes for a poorer and poorer class of car owners.

Zoning laws are being asked of state legislatures to apply to country roads, both on behalf of the rights and interests of the property holders and also on the grounds of safety, in order to keep as long open stretches of roads clear of traffic turning in and off it as possible. The new high-speed highways are oftentimes closely zoned and service stations regulated, as a wide right-of-way is obtained in the first place and managed by government. Around New York City, for instance, the famous Parkway systems, where signs say "Minimum Speed 45 miles an

SENTENCED TO DEATH



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This Leland motor is doomed to failure. Running month after month in the Leland experimental laboratory, it will someday break down.

What will cause the failure is now unknown . . . but when it happens, the faulty part will then be redesigned so as to make an even more reliable motor.

Leland motors ***must*** be dependable . . . must be so well built that 99 6/10% of all Lelands sold will ***never*** require factory service.

Test a Leland motor on your compressor, car washer, lift, or gasoline pump. Find how profitable ***real*** motor dependability can be. The Leland Electric Co., Dayton, O.

Motors for gasoline pumps, compressors, car washers, and lifts

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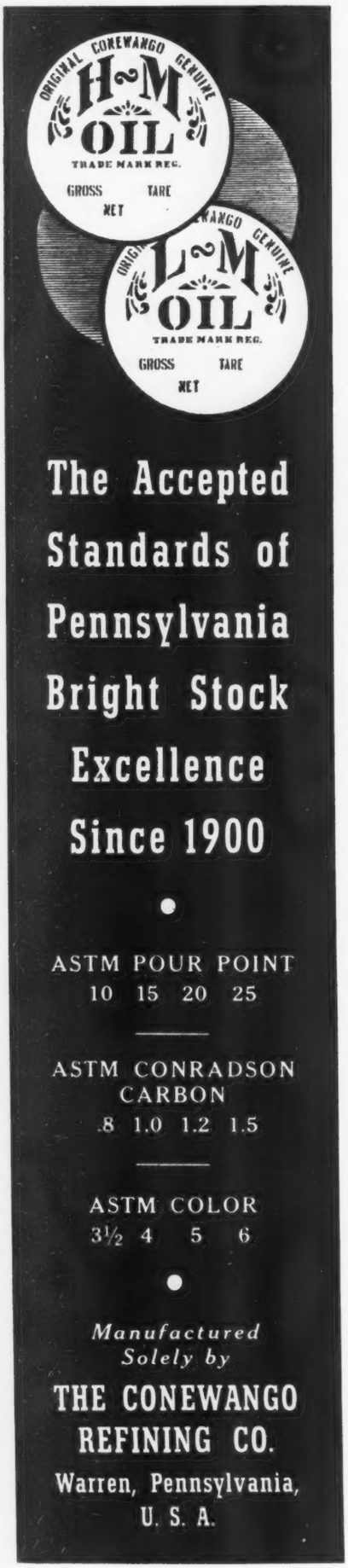

hour", government, as represented by Park Boards, controls wide stretches of land on each side on which it limits the number and type of service stations and who shall run them; also government says where you can turn off and turn on the Parkways.

Probably not since our forebears came to this country and wandered where they would, has the population been in such a state of movement. Then our forebears huddled in stockades and towns both for protection and because man and beast could walk only a few miles a day. Now we travel in comfort 400 and even 600 miles by road and 2500 and 3000 miles by air in a day. The oil man who builds new stations tomorrow will need much imagination to make sure he has a good station 10 or 20 years thereafter.

15—More Large Quantity Consumer Buying.—

As individual consumers grow and use more petroleum products, they have in time turned to buying in large quantities and to demanding and getting lower prices than the small buyer. Today they get a "consumer's tank car price", which often is as low or perhaps even lower than the jobber's tank car price. Government has been one of these big buyers to get low prices.

Years ago as the railroads grew they began to buy direct from the refiner not only because of their large quantities getting low prices but also because they needed to work closely with the refiner on their many lubricating problems. While the tonnage of all the Standard Oil companies was a mighty factor in throwing the railroad business to a now extinct company, the two facts above mentioned remain.

As manufacturing establishments grew and required more lubricants and more expert advice, they bought the petroleum products they needed direct from the refiners, at lower prices than from the marketer. Today there is relatively little industrial business of any size that is not done direct with the refiners.

When the U. S. entered the World war (1918) this government started out to buy its oils and gasolines by trade brand, for truck, passenger car and aviation use. The situation almost immediately became impossible, especially in aviation. Many aviators refused to go up unless their engines were oiled with a particular brand and supplied with a certain brand of gasoline. The result was the flying fields were littered with cans and barrels of all the oils and gasolines known, bought at retail prices.

The government organized central specification divisions for each of its petroleum uses and after much battling, set up its own specifications on which it invited bids. That cut down the confusion of brands, eliminated the expense of handling all brands, made sure that the right oil or gasoline for a particular purpose was bought, and permitted the government to buy in large quantities which meant direct from the refiner.

That policy continues today. It has been expanded to include all departments of all governments, with the result that comparatively little petroleum business is done except direct with the original sources of supply.

As the truck fleets of private consumers grew in size they too began to buy more and more direct from refiners on a quantity price basis. Many of them set up their own specifications which, while no different perhaps than the specifications of any of the good brands today, nevertheless afforded the private consumer a standard by which his own laboratory could check the quality of the product delivered. In other words the large private consumer ceased to be dependent upon the brand as a means of protecting himself in his own purchases and of insuring what he needed for his own use.

When the buyer no longer needed the seller's brand to protect himself, and when he was big enough to make his wants known to the seller—right there started the development of consumer business at consumer discounts that has caused so much criticism within the industry of recent years.

Furthermore, these bigger buyers pointed out most persuasively and definitely that, as they were not buying at retail and not buying as a result of a company's regular retail sales campaign, therefore they should be allowed to buy their petroleum products minus all the expense of selling them at retail, that is minus the cost of the retail advertising, minus the cost of the sales helps, signs, posters, sales and merchandising experts and all the extra expense used to push sales through retail outlets.

While no jobber or retailer likes to see any business get away from him, no matter what the reason, the slippage of this big consumer business might not have hurt so much had it not been for the fact that the refiners, in acquiescing in the argument of the big buyer, deducted the retail merchandising costs from a tank car price that never had those retail costs in it. That tank car price, not only in the Mid-Continent refining area but most everywhere else, was always been for unbranded goods, speaking particularly of gasolines. That tank car price has been made by the small unbranded refiner and not the major national brand company. The jobber who bought from these small refiners had to pay the cost of his advertising and merchandising out of what he collected from the retailer and the public. But the jobber who bought from a major oil company at these unbranded prices had the advertising and merchandising help given him free of charge. Either the major oil company has been guilty of cutting the price of the unbranded

refiner and giving away something extra like a premium, or else it never realized that the cost of the advertising and merchandising should have been added to the unbranded price. The result was that, when the major companies came to giving the large consumer an unbranded price, it actually gave such consumers the advertising and merchandising discount twice, if one considers price from a sound accounting viewpoint.

All of this may seem fairly simple when analyzed back this way but it is not so simple. The situation came about through natural evolution and the industry's attention being centered so largely on the problems at the retail end. The very size of its advertising and merchandising appropriations tended to take the industry's attention from the important starting point, which is the refinery gate, where there is opportunity for little glamour but from which tens of thousands of plain looking tank cars of gasoline emerge every day.

But whatever the story of the reason, when price concessions once start, no matter how much they may be justified in a given case, competition makes their application ragged. It is hard to draw a line where a certain price ends and a lower one begins. Different men have different minds on that and different men have varying urgencies for getting the business, or think they have.

So the tendency has been for all buyers whose business they consider large enough to have a tank and pump on their own properties, and who think they do not need the protection of a brand, to demand a large consumer's price. What then is a "large consumer" is a matter of barter between each refiner and each such buyer. The result has been a spreading of lower prices to the great disappointment of the Independent marketer and competing major companies.

16—The Industry's Love for a "Market Leader",—

When Mr. Rockefeller, Senior, was operating his most profitable oil monopoly, he did all the setting of profitable prices. They were so remunerative indeed that competition did not nave to bother about getting them.

Just a "little bit off the low" was still a highly pleasing price. With the assistance of a tremendously expanding market and large influxes of cheaper and cheaper crude oils, the industry has been able to pursue this policy of leaving the "other fellow" to make its prices. But in the last few years particularly the "market leaders" have shrunk so much that they can no longer raise and maintain profitable prices over all comers. These "market leaders" in order to hold their gallonage have found it necessary to meet low prices until they too, in effect, are selling at a "little bit off the low."

Until every man in the industry, salesmen included, realizes that it is his responsibility to make his own price and not leave it to the "other fellow"; until every man learns that he must fight his price up to the extent of his ability, the industry's prices can go no other way than downward. That is the only way they can go when the industry's whole thinking is to sell "at the low" or a "quarter under the low" of the other fellow's price.

The foregoing are offered as at least some of the factors that are affecting prices, and mostly adversely, in the oil industry today. They are not all of the causes. Not all of the foregoing, perhaps, effect every jobber or apply to every part of the country. We offer as much explanation as to the manner of the coming of these factors as we reasonably can. However, such explanation is not by way of defense or approval of the bad practices these points may indicate.

We believe that a study of all these factors by every oil man will permit him to do some intelligent planning either to avoid them or to make these factors work for him, to the end that he may have more to say about a price of his own making on his own merchandise.

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MULTIPLE
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SPUR GEARS
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More Simple!
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Anyone who needs multiple pumping units should be vitally interested in this new BLACKMER design.
First, we've reduced the number of gears from 4 to 2; pinions from 2 to 1. Second, we've totally enclosed the gears in one housing, and they operate in an oil bath. Third, gears are standard spur type — replaceable locally. Fourth, the base is a BLACKMER 3-point Support type, making installation a simple job — no misalignment worries. And that's only a few of the improvements! Two sizes available: 50 and 100 GPM (each pump)—furnished with or without bypasses and strainers.
LESS WEIGHT
Note that motor is mounted on a bracket, driving gears through flexible coupling. Construction reduces weight of unit and makes change of motors easy.
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FHA Tightens Up On Loans For Station Modernization

AMOUNTS of FHA insured loans applicable to oil marketing properties are reduced and the loan period shortened, in amendments to the Federal Housing Act effective July 1. The changes are:

Loan limit reduced from $10,000 to $2500.

Loan period shortened from 5 years to 3 years and 32 days.

Cost raised—A charge of ¾ of 1% for modernization and non-residential buildings, and ½ of 1% for residences is provided. This is to be borne by the bank making the loan and cannot, says FHA, be passed on to the borrower.

The New Deal has recently introduced in Congress several bills proposing loan of upwards to Three Billions to help the "small business man," among others. Amendments to the housing act, however, are contrary to these proposals to help "little business." While FHA loans for construction of any non-residential building for agricultural use can run as long as 10 years, loans for construction or modernization of non-agricultural commercial buildings, such as service stations and garages are reduced to a maximum of 3 years and 32 days.

Finance charges are not changed by the amendments, remaining a maximum of $5 per $100 for modernization and construction of non-residential buildings and $3.50 per $100 for new residential loans.

As in previous regulations, property owners must sign notes for a loan, or the borrower must have a lease running at least six months past maturity of the loan.

Briefly, new amendments divide Title One FHA loans into three classes, maximum amount being the same, $2500:

Type	Use of loan	Maximum amount	Maximum maturity	Maximum finance charge	Insurance premium
CLASS 1.	Alterations or repairs to or in connection with existing structures	$2500	3 years, 32 days	$5 per $100	¾ %
CLASS 2.	Construction of non-residential buildings..	$2500			
	(a) Non-agricultural		3 years, 32 days	$5 per $100	¾ %
	(b) Agricultural		10 years, 32 days	$5 per $100	¾ %
CLASS 3.	Construction of residential buildings	$2500	10 years, 32 days	$3.50 per $100	½ %

REPAIRS in Class 1 loans include carpentry, masonry, electrical and plumbing work.

REDECORATING includes floors, walls and woodwork. New floors or "permanent" floor covering, such as tile or cemented linoleum, may be laid.

REMODELING includes structural changes, such as building or removing partitions, building additions or converting a building from one type to another.

MODERNIZING includes building cabinets, shelves or other conveniences; installing new plumbing, heating and wiring or modernizing old systems. Installation of septic tanks or cesspools or the drilling of water wells, with plumbing equipment, would also be eligible.

LANDSCAPING includes improving ground on which building stands, grading, laying walks, building fences and planting.

Loans may not be used to complete unfinished buildings. This, however, does not exclude loans for repairing buildings damaged by deterioration, flood, fire or other casualty. Neither does it exclude the construction of an attached garage or other attached buildings in connection with a completed building.

Construction of a gasoline service station, or other buildings in connec-

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Service station modernization of the type which can be done under an FHA insured loan. The building above has been remodeled with a new exterior and the removal of the small canopy. Such loans cannot be used to purchase gasoline pumps or other movable equipment

tion with the oil industry would fall under Class 2, Sect. (a) above.

Cost of equipment used in the operation of a business occupying the building may not be included in the loan, but the cost of heating or lighting systems may.

"For example," the FHA states, "if the loan is used to build a 'gas' station, part of the loan may be used to install a heating system but not to buy and equip the structure with pumps or other trade equipment."

No part of the loan may be used to purchase land or existing buildings. More than one new structure, tourist cabins for example, may be built on a single piece of land, if the total amount expended does not exceed $2500.

Class 3 loans are for financing construction of new buildings used "wholly or in part as residences," says FHA. This includes vacation cottages, filling stations, roadside stands, and similar commercial buildings which contain living quarters.

It is relatively simple for oil marketers to apply for an FHA insured loan. Over 13,000 banks and other lending institutions have been approved by the housing administration and are supplied with standard credit statement–applications, to be filled out by the prospective borrower.

Regular income, as well as a good credit standing is necessary. The form to be filled out requires personal and credit information. Description of the proposed improvements or installations, their estimated cost and the contractor doing the work must be outlined.

The borrower must certify that all proceeds of the loan will be used exclusively in payment for alterations, repairs or new construction eligible under the act.

Some banks make it a rule to pay the contractor after the work has been satisfactorily completed, the borrower at no time receiving the money.

A practice which is frowned on by many banks is for the contractor to make arrangements with the borrower to do the work, and attempt to sell the notes to a lending institution. Many banks refuse to purchase such notes, insisting that the borrower deal directly through the bank.

J. L. Wadsworth, FHA administrator for northern Ohio, gave the schedule of payments on a $2500 loan, to show the cost to the borrower. This amount is the maximum insured under new amendments; payments on smaller loans would, of course, be correspondingly lower.

Period	Total note	Monthly payment
12 months	$2631.58	$219.30
18 months	2692.31	149.58
24 months	2753.04	114.71
36 months	2874.50	79.85

Applying this schedule of payments to a service station with an average monthly gasoline gallonage of 5000, the station operator would have to pay 4.4 cents per gallon for principal and interest on a 12 months loan.

Spreading his payments out over a longer period, however, the station

Name and address of this operator on request

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operator could decrease his cost per gallon, but he would also increase the total cost of the note to him from about $131 for 12 months to $374 for 36 months.

The cents-per-gallon cost on 5000 monthly gallonage would drop to slightly under 3 cents, with 18 months maturity, for 24 months to about 2.2 cents and to slightly over 1.5 cents per gallon when the loan runs 36 months.

While at least one authority states that, if it cost more than one cent per gallon to pay off a service station modernization loan it is a poor investment, the value of the loan should also be considered in terms of increased business it will bring into the station, or a decrease in operating costs.

Dear Editor:

May I be allowed to comment on Mr. J. Howard Pew's case against Marketing Divorcement. The writer has been either employed in or engaged in the lubricating oil and grease end of the business for the past forty years. Being on the sidelines, as you might say, I have not absorbed the viewpoint of the motor fuel jobber, and have taken issue with the proponents of disintegration, although during the years there have arisen many situations that have caused my blood to boil and that were patently unfair, unethical, and sometimes illegal.

Of all the two-fisted fighting men in the industry, I give the palm to the Pews. They apparently go along doing business independently and don't give a tinker's dam about what the other fellow thinks or does.

In the matter of transportation, I fail to see where any great increase in price would be necessary if in fact any at all. If tankers were in other hands they could be chartered. If pipelines were common carriers, in fact, they could be used as such. The same stockholders could hold stock in a transportation company that hold stock in the oil company.

To meet one of Mr. Blazer's objections, could not the refiner be allowed to operate bulk terminals to supply jobbers, taking advantage of cheap water transportation.

While Mr. Pew states his company shows profit in each branch of the industry, that is certainly not true of other companies, and the industry as a whole is on trial and not just Mr. Pew's company. Showing of profits or losses sometimes are due to bookkeeping methods.

Speaking of filling stations, while the major companies have divested themselves of the operation, they still own and lease their stations, and considering the chain store and unemployment and old age taxes they are dodging, probably think it a smart thing. This is simply a tax-dodging scheme.

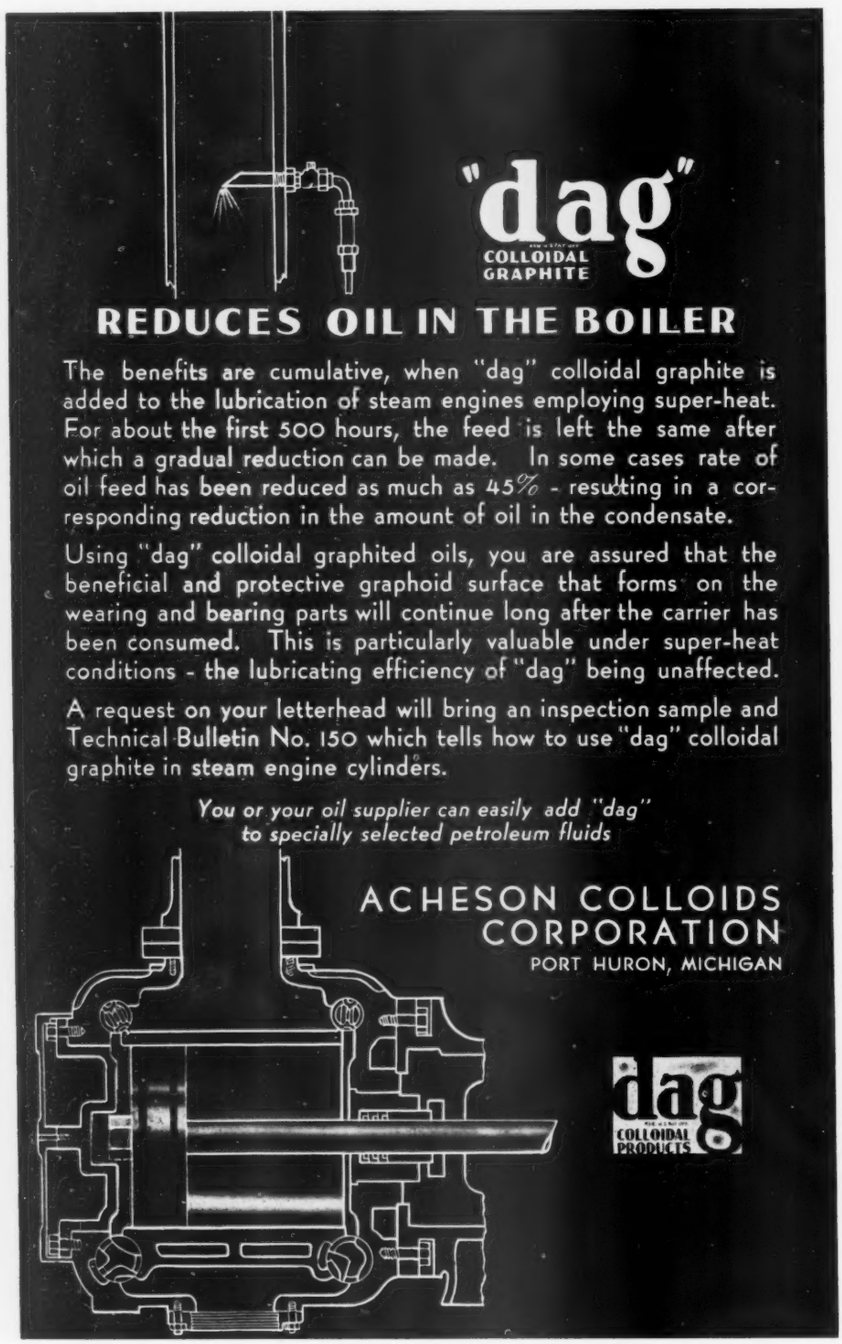
The Standard of New Jersey only operate six stations where they once operated 2100. The saving in unemployment and old age taxes alone should be close to a half-million dollars, maybe more.

As for the filling station being independent, that is mere hooey. They can change from one gas to another, but suppose they handle more than one gas, then the margin is cut.

When it comes to operating cheaper than the jobber, that is another far-fetched idea. In looking over the list of an independent jobbers association, who by the way are endorsing this legislation, I find 43 jobbers listed. Sixteen distribute Shell products, six American, four Cities Service, three Standard Oil of New Jersey, three Continental, two Texas, one Sinclair, and eight, the smallest of the lot, Independent.

If the jobber did not do a better job of marketing, he could not exist, and he would not be distributing the major company products.

With the statement that motor fuel jobbers have never handled hundreds of petroleum products, have no facilities for handling them, and no contracts with or knowledge of the busi-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The benefits are cumulative, when "dag" colloidal graphite is added to the lubrication of steam engines employing super-heat. For about the first 500 hours, the feed is left the same after which a gradual reduction can be made. In some cases rate of oil feed has been reduced as much as 45% - resulting in a corresponding reduction in the amount of oil in the condensate.
Using "dag" colloidal graphited oils, you are assured that the beneficial and protective graphoid surface that forms on the wearing and bearing parts will continue long after the carrier has been consumed. This is particularly valuable under super-heat conditions - the lubricating efficiency of "dag" being unaffected.
A request on your letterhead will bring an inspection sample and Technical Bulletin No. 150 which tells how to use "dag" colloidal graphite in steam engine cylinders.
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dag
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ness in them, I thoroughly agree, but they might learn, Mr. Pew did.

Frankly, dollar for dollar invested, I believe the jobbers have more brains and are better merchandisers than the majors, but the prestige accruing from immense wealth and influence wielded therewith, ofttimes prove insurmountable. I wonder where some of the men who speak so glibly of the jobber, would be if they were in his shoes and did not have the wealth and power behind them that they have? They would be just another "lousy jobber," for that is just what their salesmen class us as when they call on the trade.

Mr. Paul G. Blazer in his statement against the bill gave a diametrically opposite picture of the jobber to that given by Mr. Pew. One or the other is wrong.

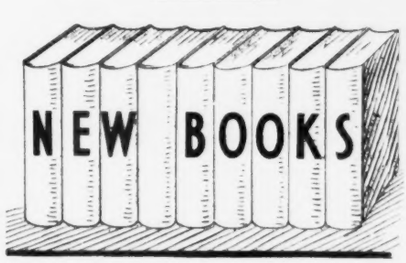
From my own observation over the years, it has been the jobber who has forced prices to a lower level, except in those instances where a deliberate attempt was made to wreck some particular jobber. The independent jobbers in the East are at a greater disadvantage in obtaining supplies than those of the Middle West due to the lack of independent refining facilities and crude oil production, and are possibly more articulate in the support of this legislation for that reason.

Following Mr. Pew's ideas to a conclusion, there are about 20 oil companies who should own and control all the oil business in the country. The investments of the jobbers and independent refiners should be scrapped.

There is a crying need for the revamping of the marketing end of the industry. This has been proved by several recent investigations. Profits are sacrificed for volume daily.

In conclusions, get this straight, there is no major oil company that does as good a job as the independent jobber who knows his business. We might not make much money, but we have a hell of a lot of fun.

A. B. Gardner, president-treasurer
United Oil Co., Inc.,
Baltimore.



Mexico at the Bar of Public Opinion, a "survey of editorial opinion in newspapers of the Western Hemisphere" concerning Mexico's appropriation of American and British oil properties in that country in March, 1938, has just been issued by the Mail and Express Publishing Co., 160 Varick St., New York, under the copyright of Standard Oil Co. (N. J.).

The compilation was made by Burt M. McConnell, former member of the Literary Digest Editorial staff, and contains editorials and special articles from more than 300 newspapers, press associations, magazines and foreign publications (in Central and South America).

In his preface, Mr. McConnell states that he was given *carte blanche* in the preparation of his book the ultimate impression to be gained from which is best expressed in Secretary Hull's note to the Mexicon government of August 22 last year, in which he said:

"The taking of property without compensation is not expropriation. It is confiscation. It is no less confiscation because there may be an expressed intent to pay some time in the future."

Returning to Author McConnell's preface for a "nucleus" around which the book was built, one finds:

"The rights of their (the expropriated companies') stockholders were entirely ignored by President Cardenas when he confiscated American owned properties in Mexico. Of even greater import to our national economy than the loss or jeopardy of such investments caused by President Cardenas' action, is the loss in foreign trade which directly followed . . . ."

Final chapter in the book quotes from editorials suggesting means for dealing with Mexico in the present (and lingering) crisis. The chapter, summing up all that has gone before, is entitled: "Shall we deal with Mexico with a firm hand?"

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Markets

Mid-Continent

TULSA, July 24.—Gasoline was offered less freely in the open market by Mid-Continent suppliers than for some time past according to reports here the past week. This was attributed by some market observers to the fact that inter-refinery purchases of several hundred cars of gasoline, and also the fact that consumption, as reflected in shipments against contracts, has been unusually heavy.

An Oklahoma refiner reported buying 50 cars of 67 octane leaded gasoline last week. Refiners for the most part said their gasoline quotations were unchanged and no open spot sales were reported.

Grade 26-70 natural gasoline was said to be in good shape, but reports indicated that demand currently was centered on lower vapor pressure grades. Quotations and sales prices reported last week for Grade 26-70 were at 2.75 cents, Group 3 and Breckenridge.

Eastern

NEW YORK, July 24.—Posted prices for gasoline along the eastern seaboard generally were unchanged during the week ended July 22, according to reports of suppliers. Although seasonally heavy movement of gasoline was said to be exceeding early expectations, suppliers said conditions both at the Gulf and in local markets were resulting in considerable shading of posted prices, particularly in the New York and Boston districts. Confirmation of rumored sales, as much as 0.25 cent below postings, could not be obtained.

California

LOS ANGELES, July 22.—Warlike maneuvers across the Atlantic brought increased inquiry for petroleum products into the California market. Quotations were reported made on one cargo of 87 octane, leaded gasoline for Atlantic foreign lifting within 60 to 90 days.

A cargo of 64 octane, 390 e.p. was reported sold to a European buyer, but the supplier was reluctant to discuss price in view of interest in a second cargo. This also held true for a cargo of gas oil which was lifted a week ago for the Orient.

With a maritime strike in prospect for the Pacific Coast next September, inquiry for package goods was reported looking up. One supplier was reported in a 100,000-case sale of export kerosine to Siam. The price was not available but was said to be less than $1.65 a case, c.i.f.

Domestic markets reflected some uncertainty in competitive grade gasoline quotations, with independent plants making deliveries in the Los Angeles Basin at 6.75 cents, exclusive of tax. This was 0.25 cent lower than minimum quotations reported a week ago.

Suppliers reported an unexpected firmness in fuel oil prices. Heavy products were reported moving at 55 cents—up 5 to 8 cents a barrel—and light grades were bringing about 10 cents a barrel more, it was said.

Gulf

NEW YORK, July 24.—A Gulf refiner reported the past week the sale of a cargo of approximately 75,000 barrels of 48-52 diesel index gas oil at 3.25 cents, early August lifting, for export shipment. An unconfirmed report of the sale of 80,000 barrels of Grade C bunker fuel at 75 cents for early August lifting, domestic shipment, was also heard here.

Prices at the Gulf generally were reported unchanged during the week. Of two foreign inquiries which had been reported for cargoes of gasoline, one was said to have been withdrawn, and the other temporarily suspended in expectation of more favorable offerings in the near future.

Pennsylvania

CLEVELAND, July 24.—Quotations for refined products in western Pennsylvania generally were reported unchanged in the week ended July 22. Reports from some refiners indicated volume of lubricating oil business was good and that bright stock and neutral oils were scarce.

A refiner who had been quoting 3 cents, New York, for 124-126 A.m.p. white crude scale reported reducing his quotation to 2.95 cents, but no other changes in quotations were reported. Shading of quotations for U. S. Motor, "Q" gasoline, and kerosine for Ohio delivery was indicated in some quarters.

N. P. N. Gasoline Index

	Dealer T.w. Cents per	Tank Car Gal.
July 24	9.67	5.68
Month ago	9.72	5.71
Year ago	10.24	6.13

Dealer index is an average of "undivided" dealer prices, ex-tax, in 50 cities.

Tank car index is a weighted average of 12 wholesale markets for regular-grade gasoline.

Mid-Western

CHICAGO, July 24.—Open spot sales of 17 cars of gasoline were reported by tank car marketers here last week, and quotations generally were reported unchanged. One tank car marketer said he had sold 10 cars of straight run gasoline, f.o.b. Central Michigan, at 4.25 cents for shipment into Wisconsin.

Occasional unconfirmed reports of price shading on 70-72 octane leaded gasoline were encountered. Some resellers cited large movement of leaded gasoline from Michigan refineries into Wisconsin and Illinois as a factor in decline of leaded gasoline movement from southwestern refineries. Jobber demand for shipments against contract generally was said to be good.

Wax

NEW YORK, July 24.—Prices 0.15 to 0.2 cent per pound lower were reported the past week for crude scale waxes at New York and New Orleans. Demand for certain scale grades, which suppliers said had been unseasonably heavy, was said to have slackened with the scarcity of these grades less acute than for some time past. Fully refined waxes were unchanged, reports indicated.

Fuel Oil

CHICAGO, July 24.—Light fuel oils were offered at lower prices by some Chicago tank car marketers the past week. Two marketers reported reducing their quotations 0.125 cent a gallon. Prices reported at the end of the week ranged from 3 to 3.75 cents for No. 1 prime white, 2.875 to 3.25 cents for No. 2 and 2.75 to 3.125 cents for No. 3 oil.

Consumer demand for heavy industrial fuels against contracts continued to hold up well, resellers said, and quotations generally were reported unchanged.

* * *

TULSA, July 24.—A one-car sale of 14-16 fuel oil was reported last week by an Oklahoma refiner. No other open spot sales of heavy fuel oil were reported in the Mid-Continent. Shipments against contracts were fairly heavy, reports indicated.

Little activity was reported in the light fuel oils. Quotations generally were unchanged, according to reports.

* * *

NEW YORK, July 24.—Higher prices for No. 2 fuel oil were reported by several suppliers in the Boston, Providence and New York districts the past week. Increases generally were 0.125 cent at New York and Providence, and 0.25 cent at Boston.

Three suppliers at New York and Boston and two at Providence also reported advancing their quotations for diesel oil, shore plants, and 28-34 gravity gas oil.

REFINERY TANK CAR MARKETS

All prices on this page are publisher's opinion of open market quotations or sales, for spot shipment (10 to 15 days) unless otherwise stated. Prices in cents per gallon, except heavy fuel oils in dollars per barrel of 42 gallons, wax and petrolatums in cents per pound in barrels, tank car lots, FOB refineries in districts designated, except where otherwise noted. Inter-refinery and export prices not included unless so stated in the respective markets. Federal, state or municipal taxes not included. Prices quoted apply on products made from legally produced crude. Unless otherwise noted, gasoline octane ratings are determined by C.F.R. Motor method, A.S.T.M. D-357-33T; and lubricating oil specifications determined according to A.S.T.M. methods, unless otherwise noted.

Gasoline

Prices Effective	July 24	July 17
OKLAHOMA		
U. S. Motor: (Octane L-3)		
62 oct. & below	4.25 – 4.625	4.25 – 4.625
63-66 oct.	4.50 – 4.875	4.50 – 4.875
67-69 oct.	4.75 – 5.125	4.75 – 5.125
70-72 oct.	5.00 – 5.375	5.00 – 5.375
60-62, 400 e.p.	(h) 4.25 –4.375	(h) 4.25 –4.375
WESTERN PENNA. REFINERY QUOTATIONS		
Bradford-Warren:		
Motor gasoline:		
U.S Motor (58-62°)	(h) 4.625	(e) 4.625
Min. 65 oct.	(h) 6.25 –6.50	(h) 6.25 –6.50
"Q" gasoline	(h) 6.25 –6.50	(h) 6.25 –6.50
Other districts:		
Motor gasoline:		
U. S. Motor (58-62° gravity):	4.50 – 5.00	4.50 – 5.00
"Q" gasoline	6.25 – 6.50	6.25 – 6.50
CENTRAL MICHIGAN (a)		
Str.-Run Gasoline	4.25 – 4.50	4.25 – 4.50
U.S. Motor: (Octane L-3)		
67-69 octane	(e) 6.25	(e) 6.25
70-72 octane	7.00 – 7.25	7.00 – 7.25

Prices Effective	July 24	July 17
CALIFORNIA (3c tax to be added if used in state)		
U. S. Motor:		
54-58 gravity, for in-state shipment	6.50 – 9.25	6.75 – 9.25
54-58 gravity, for out-side state shipment	6.50 – 9.00	6.50 – 9.00
58-61 gravity, 375-400 e.p., 65 oct. & above	7.50 – 9.75	7.50 – 9.75
N. TEX. (b)		
U. S. Motor: (Octane L-3)		
62 oct. & below	4.25 – 4.50	4.25 – 4.50
63-66 oct.	4.625– 5.00	4.625– 5.00
67-69 oct.	4.75 – 5.00	4.75 – 5.00
70-72 oct.	5.00 – 5.50	5.00 – 5.50
60-62, 400 e.p.	(h) 4.25	(h) 4.25
KANSAS For Kansas destinations only)		
U. S. Motor: (Octane L-3)		
62 oct. & below	4.50 – 5.00	4.50 – 5.00
67-69 octane	4.875– 5.50	4.875– 5.50
70-72 octane	5.25 – 5.875	5.25 – 5.875
W. TEX. (b)		
U. S. Motor: (Octane L-3)		
62 oct. & below	(h) 4.25 –4.50	(h) 4.25 –4.50
63-66 oct.	(e) 4.75	(e) 4.75
67-69 oct.	(h) 5.00	(h) 5.00
70-72 oct.	(e) 5.25	(e) 5.25

Prices Effective	July 24	July 17
CENTRAL WEST TEXAS (Prices to truck transports)		
U. S. Motor Gasoline: (Octane L-3)		
62 oct. & below	(h) 4.25	(h) 4.25
63-66 octane	(e) 5.00	(e) 5.00
66-70 octane	(e) 5.125	(e) 5.125
E. TEX.		
U. S. Motor Gasoline, (Octane L-3)		
70-72 oct.	(h) 4.625–4.75	(h) 4.625–4.75
60-62, 400 e.p.	(h) 4.25	(h) 4.25
N. LA. (For shipment to La. & Ark.)		
U. S. Motor: (Octane L-3)		
62 oct. & below	(h) 4.25 –4.375	(h) 4.25 –4.375
63-66 oct.	(e) 4.50 –4.625	(e) 4.50 –4.625
67-69 oct.	(e) 4.75 –4.875	(e) 4.75 –4.875
70-72 oct.	(e) 5.125–5.375	(e) 5.125–5.375
ARKANSAS (F.o.b. Ark. plant of one refiner, for shipment to Ark. & La.)		
U. S. Motor: (Octane L-3)		
62 octane & below	4.625	4.625
67-69 oct.	5.00	5.00
OHIO (S. O. Ohio quotations for statewide delivery and subject to exceptions for local price disturbances)		
70-72 octane	7.375	7.375

(Continued on next page)

(a) Prices FOB. Central Michigan refinery group basis, for shipment within Mich. Shipments may originate at plants outside Central group. (b) For shipment to Texas and New Mexico destinations; Group 3 prices quoted for northern shipment. (c) Excluding Detroit shipment. (e) One refiner quoting. (f) Two suppliers quoting. (g) To re-sellers holding licenses. (h) Two refiners quoting. (i) No quotations reported. (j) Prices discontinued.

MID-WESTERN TANK CAR MARKET

Prices in this Midwestern Tank Car Market table are gathered from refiners and tank car marketers or brokers from their offices located in Chicago and the surrounding territory. While the prices are quoted on a Group 3 (Oklahoma) freight rate basis, this is in accordance with the custom of the oil industry which uses Group 3 as a price basis for the ease of comparing prices even when the material originates in another refining district. Generally when prices are quoted in this Chicago market, the origin of the material is not known at the time the quotation is given, oftentimes even with the quoting refiners who have refineries in more than one refining district. All other gasoline prices are given by and for the particular refining district where the material is made and from which it is shipped.

Gasoline

Prices Effective	July 24	July 17
U. S. Motor: (Octane L-3)		
62 oct. and below	4.00 – 4.50	4.00 – 4.50
63-66 oct.	4.25 – 4.50	4.25 – 4.50
67-69 oct.	4.375– 4.875	4.375– 4.875
70-72 oct.	4.50 – 5.25	4.50 – 5.25

Kerosine

41-43 gravity, w.w.	3.375– 4.00	3.50 – 4.125
42-44 gravity, w.w.	3.625– 4.25	3.625– 4.375

Fuel and Gas Oils

Prices Effective	July 24	July 17
No. 1 p.w.	3.00 – 3.75	3.125– 3.75
No. 1 straw	3.00 – 3.375	3.00 – 3.375
No. 2 straw	2.875– 3.25	3.00 – 3.25
No. 3	2.75 – 3.125	2.875– 3.125
No. 5	$0.575–$0.65	$0.575–$0.65

Prices Effective	July 24	July 17
No. 6	$0.35 –$0.45	$0.35 –$0.45
U. G. I. gas oil	2.625– 3.00	2.625– 3.00
Range oil	3.25 – 3.875	3.25 – 3.875

Chicago Naphtha and Solvent

(FOB Group 3 as quoted by two Chicago sellers)

Stoddard solvent	5.875	5.875
Cleaners' naphtha	6.375	6.375
V. M. & P. naphtha	6.375	6.375
Mineral spirits	5.375	5.375
Rubber solvent	6.375	6.375
Lacquer diluent	7.375	7.375

Daily range of gasoline prices as reported in PLATT'S OILGRAM (Week Ended July 21, 1939)

	July 17	July 18	July 19	July 20	July 21
U. S. Motor, (Octane Number determined according to L-3 Method in Okla., Texas and Mid-Western Districts):					
62 octane and below:					
Oklahoma	4.25 – 4.625	4.25 – 4.625	4.25 – 4.625	4.25 – 4.625	4.25 – 4.625
(a) North Texas	4.25 – 4.50	4.25 – 4.50	4.25 – 4.50	4.25 – 4.50	4.25 – 4.50
West Texas	(c) 4.25 –4.50	(c) 4.25 –4.50	(c) 4.25 –4.50	(c) 4.25 –4.50	(c) 4.25 –4.50
Mid-Western (Group 3 basis)	4.00 – 4.50	4.00 – 4.50	4.00 – 4.50	4.00 – 4.50	4.00 – 4.50
63-66 octane:					
Oklahoma	4.50 – 4.875	4.50 – 4.875	4.50 – 4.875	4.50 – 4.875	4.50 – 4.875
(a) North Texas	4.625– 5.00	4.625– 5.00	4.625– 5.00	4.625– 5.00	4.625– 5.00
West Texas	(b) 4.75	(b) 4.75	(b) 4.75	(b) 4.75	(b) 4.75
Mid-Western (Group 3 basis)	4.25 – 4.50	4.25 – 4.50	4.25 – 4.50	4.25 – 4.50	4.25 – 4.50
67-69 octane:					
Oklahoma	4.75 – 5.125	4.75 – 5.125	4.75 – 5.125	4.75 – 5.125	4.75 – 5.125
(a) North Texas	4.75 – 5.00	4.75 – 5.00	4.75 – 5.00	4.75 – 5.00	4.75 – 5.00
West Texas	(c) 5.00	(c) 5.00	(c) 5.00	(c) 5.00	(c) 5.00
Mid-Western (Group 3 basis)	4.375– 4.875	4.375– 4.875	4.375– 4.875	4.375– 4.875	4.375– 4.875
70-72 octane:					
Oklahoma	5.00 – 5.375	5.00 – 5.375	5.00 – 5.375	5.00 – 5.375	5.00 – 5.375
(a) North Texas	5.00 – 5.50	5.00 – 5.50	5.00 – 5.50	5.00 – 5.50	5.00 – 5.50
West Texas	(b) 5.25	(b) 5.25	(b) 5.25	(b) 5.25	(b) 5.25
East Texas	(c) 4.625–4.75	(c) 4.625–4.75	(c) 4.625–4.75	(c) 4.625–4.75	(c) 4.625–4.75
Mid-Western (Group 3 basis)	4.50 – 5.25	4.50 – 5.25	4.50 – 5.25	4.50 – 5.25	4.50 – 5.25
Motor Gasoline, 60-64 octane:					
New York harbor	5.75 – 5.90	5.75 – 5.90	5.75 – 5.90	5.75 – 5.90	5.75 – 5.90
Philadelphia district	5.75 – 6.50	5.75 – 6.50	5.75 – 6.50	5.75 – 6.50	5.75 – 6.50
Baltimore district	(b) 5.75	(b) 5.75	(b) 5.75	(b) 5.75	(b) 5.75
Motor Gasoline, 65 octane & above:					
New York harbor	6.00 – 6.25	6.00 – 6.25	6.00 – 6.25	6.00 – 6.25	6.00 – 6.25
Philadelphia district	6.00 – 6.50	6.00 – 6.50	6.00 – 6.50	6.00 – 6.50	6.00 – 6.50
Baltimore district	6.00 – 7.00	6.00 – 7.00	6.00 – 7.00	6.00 – 7.00	6.00 – 7.00
U. S. Motor, 58-62°:					
Bradford-Warren (Western Penna.)	(b) 4.625	(b) 4.625	(b) 4.625	(b) 4.625	(b) 4.625
Other districts (Western Penna.)	4.50 – 5.00	4.50 – 5.00	4.50 – 5.00	4.50 – 5.00	4.50 – 5.00
Motor Gasoline, Min. 65 octane:					
Bradford-Warren (Western Penna.)	(c) 6.25 –6.50	(c) 6.25 –6.50	(c) 6.25 –6.50	(c) 6.25 –6.50	(c) 6.25 –6.50
"Q" Gasoline:					
Bradford-Warren (Western Penna.)	(c) 6.25 –6.50	(c) 6.25 –6.50	(c) 6.25 –6.50	(c) 6.25 –6.50	(c) 6.25 –6.50
Other Districts (Western Penna.)	6.25 – 6.50	6.25 – 6.50	6.25 – 6.50	6.25 – 6.50	6.25 – 6.50

(a) For shipment to Texas and New Mexico destinations: Group 3 prices are quoted on northern shipment. (b) One refiner quoting. (c) Two refiners quoting.

REFINERY TANK CAR MARKETS

All prices on this page are publisher's opinion of open market quotations or sales, for spot shipment (10 to 15 days). Prices in cents per gallon except heavy fuel oils in dollars per barrel of 42 gallons, tank car lots, FOB refineries in districts designated, except where otherwise noted. Inter-refinery and export prices not included, unless so stated in the respective markets. Federal, state or municipal taxes not included. Prices quoted apply on products made from legally produced crude. Unless otherwise noted, gasoline octane ratings are determined by C.F.R. Motor method, A.S.T.M. D-357-33T; and lubricating oil specifications determined according to A.S.T.M. methods, unless otherwise noted.

Natural Gasoline

(Prices to blenders on freight basis shown below. Shipments may originate in any Mid-Continent manufacturing district.)

Prices Effective	July 24	July 17
FOB GROUP 3		
Grade 26-70	(l)2.75	(l)2.75
FOB BRECKENRIDGE		
Grade 26-70	(l)2.75	(l)2.75
CALIFORNIA (F.o.b. plants in Los Angeles basin) 75-85, 350-375 e.p. for blending	6.00 – 6.75	6.00 – 6.75

Kerosine

WESTERN PENNA. REFINERY QUOTATIONS		
Bradford-Warren:		
45 gravity w.w.	4.875	4.875
46 gravity w.w.	(e)5.375	(e)5.375
Other districts:		
45 gravity w.w.	4.875– 5.00	4.875– 5.00
46 gravity w.w.	(h)5.125	(e)5.125
47 gravity w.w.	5.125– 5.25	5.125– 5.25
CENTRAL MICHIGAN (a)		
47-49 gravity w.w.	4.50 – 5.20	4.50 – 5.20
OKLAHOMA		
41-43 gravity w.w.	3.625– 4.25	3.625– 4.25
42-44 gravity w.w.	3.75 – 4.625	3.75 – 4.625
KANSAS (For Kansas destinations only)		
41-43 gravity w.w.	(e)4.125	(e)4.125
42-44 gravity w.w.	4.125– 4.50	4.125– 4.50
N. TEX. (b)		
41-43 gravity w.w.	4.00 – 4.25	4.00 – 4.25
N. LA. (For shipment to La. and Ark.)		
41-43 gravity w.w.	(h) 3.75 –4.125	(h) 3.75 –4.125
ARK. (F.o.b. Ark. plant of one refiner for shipment to Ark. and La.)		
41-43 gravity w.w.	4.25	4.25
CALIFORNIA		
40-43 gravity w.w.	5.00 – 7.00	5.00 – 7.00

Gas *and* Fuel Oils

WESTERN PENNA. REFINERY QUOTATIONS		
Bradford-Warren:		
36-40 gravity	(e)4.625	(e)4.625
Other districts: (Excluding Pittsburgh District Prices)		
36-40 gravity	4.25	4.25
CENTRAL MICHIGAN (a)		
P.W. Distillate	4.00 – 4.50	4.00 – 4.50
No. 3 gas oil, Str.	3.75 – 4.25	3.75 – 4.25
U.G.I. gas oil	3.50 – 4.00	3.50 – 4.00
Fuel Oils (Vis. at 100):		
500-700 Vis.	2.375– 2.50	2.375– 2.50
300-500 Vis.	2.50 – 2.75	2.50 – 2.75
100-300 Vis.	2.75 – 3.25	2.75 – 3.25
OKLAHOMA		
No. 1 prime white	3.125– 3.875	3.125– 3.875
No. 1 straw	(e)3.375	(e)3.375
No. 2 straw	3.25 – 3.375	3.25 – 3.375
No. 2 dark	(h) 2.75 –3.25	(h) 2.75 –3.25
U.G.I. gas oil	(h) 3.00 –3.25	(h) 3.00 –3.25
28-30 gravity fuel oil	(e)3.25	(e)3.25
28-30 gravity zero fuel	2.50 – 3.25	2.50 – 3.25
24-26 gravity fuel	(e) $0.85–$0.90	(e) $0.85–$0.90
14-16 gravity fuel	(e)$0.70	(e)$0.70
No. 6 fuel	(h) $0.35–$0.45	(h) $0.35–$0.45
Range oil	(h)3.625	(h)3.625
KANSAS (For Kans. destinations only).		
No. 1 p.w. fuel oil	3.75 – 3.875	3.75 – 3.875
10-14 gravity fuel oil	$0.45 – $0.80	$0.45 – $0.80
N. TEX. (b)		
No. 1 Prime white	(e)3.75	(e)3.75
N. LA. (For shipment to La. and Ark.)		
20-24 gravity fuel	(e) $0.95–$1.05	(e) $0.95–$1.05
16-20 gravity fuel	(e) $0.75–$0.85	(e) $0.75–$0.85
10-14 gravity fuel	(e) $0.65–$0.75	(e) $0.65–$0.75
ARK. (F.o.b. Ark. plant of one refiner, for shipment to Ark. and La.)		
No. 2 fuel	3.375	3.375
28-30 gravity gas oil, zero	3.125	3.125
Tractor Fuel	(j)4.50	(j)4.50

Prices Effective	July 24	July 17
CALIFORNIA		
San Joaquin Valley:		
Heavy fuel	$0.55 –$0.75	$0.50 –$0.75
Light fuel	$0.75 –$0.85	$0.75 –$0.85
Diesel fuel (per gal.)	2.75 – 4.00	2.75 – 4.00
Stove dist. (per gal.)	3.00 – 5.00	3.00 – 5.00
Los Angeles:		
Heavy fuel	$0.55 –$0.90	$0.45 –$0.90
Light fuel	$0.65 –$1.00	$0.55 –$1.00
Diesel fuel (per gal.)	2.00 – 4.00	2.00 – 4.00
Stove dist. (per gal.)	2.25 – 5.00	2.25 – 5.00
San Francisco:		
Heavy fuel	$0.95	$0.95
Light fuel	$1.05	$1.05
Diesel fuel (per gal.)	4.50	4.50
Stove dist. (per gal.)	5.50	5.50

Note: All above heavy fuels meet Pacific specification 400; light fuel, spec. 300; Diesel fuels, spec. 200; and stove distillate, spec. 100.

Neutral Oils

WESTERN PENNA. REFINERY QUOTATIONS		
Viscous Neutrals No. 3 col. (Viscosity at 70° F.)		
200 Vis. (180 at 100°) 420-425 fl.		
0 p.t.	(e)19.50	(e)19.50
10 p.t.	(e)18.50	(e)18.50
15 p.t.	(e)18.00	(e)18.00
25 p.t.	16.50 –17.00	16.50 –17.00
150 Vis. (143 at 100) 400-405 fl.		
0 p.t.	(e)18.50	(e)18.50
10 p.t.	(e)17.50	(e)17.50
15 p.t.	(e)16.50	(e)16.50
25 p.t.	14.50 –15.50	14.50 –15.50
SOUTH TEXAS		
Vis Color		
Pale Oils: (*Vis. at 100°F.*)		
100 No. 1½-2½	4.50 – 5.00	4.50 – 5.00
200 No. 2-3	6.00 – 6.25	6.00 – 6.25
300 No. 2-3	6.50 – 6.75	6.50 – 6.75
500 No. 2½-3½	7.50 – 7.75	7.50 – 7.75
750 No. 3-4	8.00 – 8.25	8.00 – 8.25
1200 No. 3-4	8.375– 8.75	8.375– 8.75
2000 No. 4	8.50 – 9.25	8.50 – 9.25
Red Oils:		
200 No. 5-6	6.00 – 6.25	6.00 – 6.25
300 No. 5-6	6.50 – 6.75	6.50 – 6.75
500 No. 5-6	7.50 – 7.75	7.50 – 7.75
750 No. 5-6	8.00 – 8.25	8.00 – 8.25
1200 No. 5-6	8.375– 8.75	8.375– 8.75
2000 No. 5-6	8.50 – 9.25	8.50 – 9.25

Note: Red oil prices cover oils with green cast; blue cast red oils are slightly lower in some cases.

MID-CONTINENT (Vis. at 100° F.; F.o.b. Tulsa basis).

Pale Oils: **(0 to 10 P.P.)**

Vis. Color		
60-85—No. 2	5.50	5.50
86-110—No. 2	6.00	6.00
150—No. 3	9.00	9.00
180—No. 3	9.50 –10.00	9.50 –10.00
200—No. 3	10.00 –10.50	10.00 –10.50
250—No. 3	11.00 –11.50	11.00 –11.50
280—No. 3	12.50	12.50
300—No. 3	13.00	13.00
Red Oils:		
180—No. 5	(e)9.00	(e)9.00
200—No. 5	9.00 – 9.50	9.00 – 9.50
280—No. 5	(h) 11.50–11.75	(h) 11.50–11.75
300—No. 5	(h)12.00	(h)12.00

Note: The following oils, of 15 to 25 p.p., are generally quoted these amounts under 0-10 p.p.; viscous oils, 0.5c; non-viscous, 0.25c. Viscous oils (150-300 vis.), No. 4 color, generally are quoted 0.5c above No. 5 color oils.

CHICAGO (Vis. at 100° F.)

(c) Pale Oils 0 to 10 p.p.

Vis. Color		
60-85—No. 2	7.25	7.25
86-110—No. 2	7.75	7.75
150—No. 3	9.00	9.00
180—No. 3	10.00	10.00
200—No. 3	10.50	10.50
250—No. 3	11.50	11.50

Prices Effective	July 24	July 17
CHICAGO (Continued)		
(e) Red Oils:		
180—No. 5	9.00	9.00
200—No. 5	9.50	9.50
250—No. 5	10.50	10.50
280—No. 5	11.50	11.50
300—No. 5	11.75	11.75

Note: Viscous oils, 15 to 30 p.p. are quoted 0.5c lower; 60-85 and 86-110 No. 2 non-viscous oils, 15 to 30 p.p., 0.25c lower. To obtain delivered prices in Chicago, add 0.25c per gal.

Cylinder Stocks

MID-CONTINENT (F.o.b. Tulsa basis)

Bright Stocks:		
190-200 Vis. at 210° D.	(e)19.00	(e)19.00
150-160 Vis. at 210° D:		
0 to 10 p.p.	14.25 –16.00	14.25 –16.00
10 to 25 p.p.	13.50 –15.00	13.50 –15.00
25 to 40 p.p.	(h) 13.25–13.50	(h) 13.25–13.50
150-160 vis. at 210° E.	12.50 –14.50	12.50 –14.50
120 Vis. at 210° D:		
0 to 10 p.p.	(h) 13.75–14.50	(h) 13.75–14.50
25 to 40 p.p.	(e)12.75	(e)12.75
600 S.R. Dark Green	(e)5.50	(e)5.50
600 S.R. Olive Green	(h) 7.00 –7.50	(h) 7.00 –7.50
631 S.R.	(e)12.50	(e)12.50
Black Oil	(h) 3.50 –4.00	(h) 3.50 –4.00
(e) CHICAGO (Viscosity at 210°)		
Unfiltered Steam Refined:		
140	9.00	9.00
160	10.00	10.00
200	11.00	11.00
Bright stocks, 160 vis. at 210. No. 8 color:		
0 to 10 p.p.	15.75	15.75
15 to 25 p.p.	14.75	14.75
30 to 40 p.p.	14.25	14.25
E filtered Cyl. Stock	13.50	13.50

Note: To obtain prices delivered in Chicago, add 0.25c per gal.

WESTERN PENNA. REFINERY QUOTATIONS		
600 S.R. filterable	8.00 – 9.00	8.00 – 9.00
650 S.R.	10.90 –11.00	10.00 –11.00
600 fl.	10.50 –12.00	10.50 –12.00
630 fl.	13.00 –14.00	13.00 –14.00
Bright stock, 145-155 vis. at 210°, 540-550 flash, No. 8 color:		
10 p.t.	18.50 –19.50	18.50 –19.50
15 p.t.	17.50 –18.50	17.50 –18.50
25 p.t.	16.00 –16.50	15.50 –16.50

Petrolatums

WESTERN PENNA. (In bbls., carloads; in tank cars, 0.5c per lb. less. One refiner reports he equalizes freight with nearest refinery to destination).

Snow White	5.875– 6.125	5.875– 6.125
Lily White	4.875– 5.125	4.875– 5.125
Cream White	3.875– 4.125	3.875– 4.125
Light Amber	2.50	2.50
Amber	2.25	2.25
Red	(e)2.125	(e)2.125

Wax

WESTERN PENNA. REFINERY QUOTATIONS In bbls., carloads, New York.

122-124 A.m.p., w.c. scale	(h) 2.90 – 2.95	(h) 2.90 –3.00
124-126 A.m.p., w.c. scale	2.85 – 2.95	2.85 – 3.00

OKLAHOMA (In bbls. or burlap bags, carloads)

124-126 A.m.p., w.c. scale	(h)3.00	(h)3.00

CHICAGO (FOB Chicago district refinery of one refiner, in bags or slabs loose, carloads. Melting points are E.M.P. (A.S.T.M.) methods; add 3° F. to convert into A.m.p.)

Fully refined:		
122-124 (bags only)	4.25	4.25
125-127	4.35	4.35
127-129	4.70	4.70
130-132	5.00	5.00
132-134	5.25	5.25
135-137	6.00	6.00

(a) Prices FOB. Central Michigan refinery group basis, for shipment within Mich. Shipments may originate at plants outside Central group. (b) For shipment to Texas and New Mexico destinations: Group 3 prices quoted on northern shipments. (c) Excluding Detroit shipment. (e) One refiner quoting. (f) No quotations reported. (g) To resellers holding licenses. (h) Two refiners quoting (j) For shipment to Ark. points only. (k) Two suppliers quoting. (l) Quotations. (m) Sales.

TANK WAGON MARKETS

Tank car, tank wagon, dealer, and service station prices for gasoline **do not include taxes;** *they do, however, include inspection fees as shown in general footnote. Gasoline taxes, shown in separate column, include* 1c *federal, and state taxes; also city and county taxes as indicated in footnotes. Kerosine tank wagon prices also do not include taxes; kerosine taxes, where levied, are indicated in footnotes. Dealer discounts are shown in footnotes; for commercial consumer discounts, see NPN for March 29, April 12, April 19 and June 7, 1939, or write to NPN. These prices in effect July 24, 1939, as posted by principal marketing companies at their headquarters offices, but subject to later correction.*

S. O. New Jersey

Essolene
(*Regular Grade*)

	Consumer Tank Car	Dealer T.W.	Gasoline Taxes	Kerosine T.W.
*Atlantic City, N. J.	6.9	8.7	4	7
*Newark, N. J.	6.9	8.7	4	7
Annapolis, Md.	7.85	9.35	5	8
Baltimore, Md.	7.25	8.75	5	8
Cumberland, Md.	8.65	11.15	5	10
Washington, D. C.	7.5	9	3	9.5
Danville, Va.	8.45	10.95	6	12.9
Norfolk, Va.	7.25	9.75	6	10.5
Petersburg, Va.	7.55	10.05	6	11.7
Richmond, Va.	7.55	10.05	6	10.7
Roanoke, Va.	8.75	11.25	6	11
Charleston, W. Va.	8.05	10.55	6	12.6
Parkersburg, W. Va.	7.35	9.35	6	11.2
Wheeling, W. Va.	8.35	10.25	6	12.2
Charlotte, N. C.	8.4	10.9	7	11.8
Hickory, N. C.	8.95	11.45	7	12.3
Mt. Airy, N. C.	8.8	11.3	7	12.2
Raleigh, N. C.	8.15	10.65	7	11.5
Salisbury, N. C.	8.45	10.95	7	11.9
Charleston, S. C.	7.25	9.75	7	10.6
Columbia, S. C.	8.25	10.75	7	11.6
Spartanburg, S. C.	8.95	11.45	7	12.4

Discount to undivided dealers: thru territory, except New Jersey points, which see in "Note" below: Dealer t.w. price less 0.5c per gal.

*Effective Dec. 1, 1938, S. O. New Jersey posted a minimum retail resale price of 11.2c thru New Jersey, except Trenton area and Cumberland county.

Note: While the above posted prices continue at Atlantic City and Newark, N. J., dealers will pay a net price of 8.2c per gal. for Essolene. Dealers having pumps marked only Esso, Essolene and "Standard" White gasoline will pay 7.7c per gal. for Essolene.

Kerosine Discount: 1c off t.w. price or 25 gals., or more, under contract thru territory (Baltimore City contract not necessary) except no discount in state of New Jersey.

Socony-Vacuum Oil Co., Inc.

(S. O. New York Division)

Socony Mobilgas
(*Regular Grade*)

	Consumer Tank Car	"Split" Dealer T.W.	Gasoline Taxes	Kerosine T.W.
Metropolitan N.Y. City: Boroughs of Manhattan, Bronx and Brooklyn (Kings and Queens)	6.6	8.5	*5	6.75
Borough of Richmond (Staten Is.)	6.6	8.5	*5	6.75
Albany, N. Y.	6.5	8.8	5	7
Binghamton, N. Y.	7.8	10	5	8
Buffalo, N. Y.	7.4	6.8	5	7.5
Jamestown, N. Y.	7	8.5	5	7.5
Plattsburg, N. Y.	7.1	9.6	5	7.5
Rochester, N. Y.	7.6	9	5	7.75
Syracuse, N. Y.	7.2	8.5	5	7.25
Danbury, Conn.	7.3	9	4	7.75
Hartford, Conn.	6.9	9	4	6.50
New Haven, Conn.	6.8	8.25	4	6
Bangor, Me.	6.9	7.8	5	7
Portland, Me.	6.5	7.8	5	6.75
Boston, Mass.	6.5	8.25	4	6.5
Concord, N. H.	7.3	9.6	5	7.5
Lancaster, N. H.	8.1	10.6	5	8.5
Manchester, N. H.	7.2	9.2	5	7.25
Providence, R. I.	6.5	8.3	4	6.5
Burlington, Vt.	7	6.5	5	7.25
Rutland, Vt.	7.4	8.5	5	7.5

*Plus 2% city sales tax computed at time of each sale.

Discount to undirided dealers: 0.5c less than "split" dealer t.w.

Atlantic Refining

Atlantic White Flash Gasoline
(*Regular Grade*)

	Commercial Tank Car	Dealer T.W.	Gasoline Taxes	Kerosine T.W.
Philadelphia, Pa.	7	8.5	5	10
Pittsburgh	8	9.5	5	10.5
Allentown	7.5	9	5	10.5
Erie	8	9.5	5	10
Scranton	8	9.5	5	10.5
Altoona	8	9	5	10.5
Harrisburg	7.5	9	5	10.5
Williamsport	8	9.5	5	10.5
Dover, Del.	...	9	5	10.5
Wilmington	...	8.5	5	9.75
Boston, Mass.	...	8.25	4	6.25
Springfield, Mass.	...	8.5	4	7
Worcester, Mass.	...	8.5	4	7
Fall River, Mass.	...	8	4	7
Hartford, Conn.	...	9	4	6.5
New Haven, Conn.	...	8.25	4	7
Providence, R. I.	...	8.3	4	6.5
Atlantic City, N. J.	...	8.2	4	7
Camden, N. J.	...	8.1	4	7
Trenton, N. J.	...	8.2	4	7
Annapolis, Md.	...	9.35	5	9.5
Baltimore, Md.	...	8.75	5	8
Hagerstown, Md.	...	9.85	5	10
Richmond, Va.	...	10.05	6	10.7
Wilmington, N. C.	...	9.85	7	10.8
Brunswick, Ga.	...	9.5	7	*10.5
Jacksonville, Fla.	...	8	8	10

*Georgia has kerosine tax of 1c per gal., not included in above price.

Discount to undivided dealers: Dealer t.w. less 0.5c per gal. except in Georgia and Florida, dealer t.w. and undivided dealer price is same.

Discounts: At Scranton, Pa., 1c per gal. voluntary discount allowed to dealers only at time of delivery, effective July 8, 1939.

Kerosine discount: Thru Pennsylvania and Delaware, 2c per gal. off t.w. price on t.w. deliveries of 25 gals. or more at one time, effective since Oct. 29, 1936.

S. O. Ohio

Sohio X-70 Gasoline
(Regular Grade)

	Consumer T.W.	†Divided Dlr.	‡S.S.	Gasoline Taxes	Kerosine T.W.
Ohio, Statewide	10.5	9.5	12.5	5	*12
Akron	10.5	8.5	10.5	5	*8.5
Cincinnati	10.5	9	11.5	5	*12
Cleveland	10.5	9.5	12.5	5	*12
Columbus	10.5	9	11.5	5	*12
Dayton	10.5	9	11.5	5	*12
Marietta	10.5	9	11.5	5	*12
Portsmouth	10.5	9.5	12.5	5	*12
Toledo	10.5	8.5	11	5	*12
Youngstown	10.5	9	11.5	5	*11.5

Renown Gasoline
(Third Grade)

Ohio, Statewide	10.5	9.5	12.5	5	....
Akron	10.5	8.5	10.5	5	....
Cincinnati	10.5	9	11.5	5	....
Cleveland	10.5	9.5	12.5	5	....
Columbus	10.5	9	11.5	5	....
Dayton	10.5	9	11.5	5	....
Marietta	10.5	9	11.5	5	....
Portsmouth	10.5	9.5	12.5	5	....
Toledo	10.5	8.5	11	5	....
Youngstown	10.5	9	11.5	5	....

Note: Prices at other Ohio points may be obtained by writing NPN.

*Ohio has kerosine tax of 1c per gal., not included in above prices.

†This price also to authorized agents, exclusive of 0.5c rental.

‡Prices are at company-operated service stations.

Discount to undivided dealers: 0.5c less than divided dealer t.w.

S. O. Kentucky

Crown Gasoline
(*Regular Grade*)

	Consumer T.W.	Net Dlr.	Gasoline Taxes	Kerosine T.W.
Covington, Ky.	11.5	8.5	6	9.5
Lexington, Ky.	13.5	10.5	6	10
Louisville, Ky.	12.5	9.5	6	9
Paducah, Ky.	12	9	6	9
Jackson, Miss.	12	9	7	*9
Vicksburg, Miss.	12	9	7	*8.5
Birmingham, Ala.	13	10	*8	8.5
Mobile, Ala.	9.5	6.5	*9	8.5
Montgomery, Ala.	13	10	*9	*9.5
Atlanta, Ga.	14	11	7	*8
Augusta, Ga.	13	10	7	*8
Macon, Ga.	12	9	7	*9
Savannah, Ga.	12	9	7	*7
Jacksonville, Fla.	12	9	8	8
Miami, Fla.	11.5	8.5	8	8
Pensacola, Fla.	12	9	*9	8
Tampa, Fla.	12	9	8	7.5

Kyso Gasoline
(*Third Grade*)

Covington, Ky.	10	7.5	6	....
Lexington, Ky.	12	9.5	6	....
Louisville, Ky.	11	8.5	6	....
Paducah, Ky.	10	7.5	6	....
Jackson, Miss.	10.5	8	7	....
Vicksburg, Miss.	10.5	8	7	....
Birmingham, Ala.	11	8.5	*8	....
Mobile, Ala.	8	5.5	*9	....
Montgomery, Ala.	11	8.5	*9	....
Atlanta, Ga.	12	8.5	7	....
Augusta, Ga.	11.5	9	7	....
Macon, Ga.	9.5	7	7	....
Savannah, Ga.	10	7.5	7	....
Jacksonville, Fla.	10.5	8	8	....
Miami, Fla.	9.5	7	8	....
Pensacola, Fla.	10.5	8	*9	....
Tampa, Fla.	10.5	8	8	....

Discounts to all tank wagon consumers: Effective Jan. 4, 1937, thru territory, on Crown gasoline, 3c per gal. below consumer t.w. price; on Kyso, 2.5c below, regardless of quantity purchased, per month

**Taxes*: In the tax column is included these city and county gasoline taxes at the following points: Mobile, 2c city; Birmingham, 1c city; Montgomery, 1c city and 1c county; Pensacola, 1c city. Georgia and Montgomery, Ala. have kerosine taxes of 1c per gal., and Mississippi 0.5c, not included in above prices.

S. O. Indiana

Red Crown (*Regular Grade*)
Stanolind (*Third Grade*)

	Red Crown Cons. T.W.	Dealer Prices Red Crown T.W.	Stanolind T.W.	Gasoline Taxes	Kerosine T.W.
Chicago, Ill.	11.1	9.1	7.9	4	10
Decatur, Ill.	11.1	9.6	8.2	4	10
Joliet, Ill.	11.1	9.6	8.1	4	10
Peoria, Ill.	11.1	9.6	9.1	4	10
Quincy, Ill.	10.9	9.4	7.3	4	9.8
Indianapolis, Ind.	11.8	10.3	8.9	5	*10.7
Evansville, Ind.	11.6	10.1	9.6	5	*10.5
South Bend, Ind.	12.1	10.6	10.1	5	*10
Detroit, Mich.	9.6	8.1	7.6	4	7.1
Grand Rapids, Mich.	10	8.5	8	4	9.7
Saginaw, Mich.	11.8	9.3	8.6	4	9.3
Green Bay, Wis.	11.9	10.4	9.9	5	10.8
Milwaukee, Wis.	11.3	9.8	9.3	5	10.2
La Crosse, Wis.	11.5	10	9.5	5	10.4
Minneapolis-St. Paul	11.5	10	9.5	5	10.4
Duluth, Minn.	11.9	10.4	9.9	5	10.8
Mankato, Minn.	11.5	10	9.5	5	9.4
Des Moines, Ia.	10.9	9.4	8.9	4	*9.8
Davenport, Ia.	11.1	9.6	9.1	4	*10
Mason City, Ia.	11.3	9.8	6.9	4	*10.2
St. Louis, Mo.	10.7	9.2	8	*4	8
Kansas City, Mo.	10.4	8.9	7.9	*4	8
St. Joseph, Mo.	10.4	8.9	8.4	4	7.9
Fargo, N. D.	12.7	11.2	10.7	5	11.6
Huron, S. D.	12	10.5	10	5	10.9
Wichita, Kans.	9.9	6.6	5.5	4	7.4

**Taxes*: in the tax column is included these city and state gasoline taxes at following points: Kansas City, St. Joseph and St. Louis, 1c city tax. Kerosine taxes: Indiana has 4c, Iowa 3c per gal. state tax, not included in above prices.

S. O. Nebraska

Standard Red Crown Gasoline
(*Regular Grade*)

	T.W.	Dealer	Gasoline Taxes	Kerosine T.W.
Omaha, Neb.	11.5	10	6	10.3
McCook	10.5	7.5	6	9
Norfolk	11	9.9	6	9
North Platte	12.3	10.8	6	11.1
Scottsbluff	12	9.9	6	11

S. O. Louisiana

Essolene
(*Regular Grade*)

	Consumer Tank Car	Dealer T.W.	Gasoline Taxes	Kerosine T.W.
Little Rock, Ark.	7.25	9.75	7.5	10
Alexandria, La.	6.75	9.25	8	*11.5
Baton Rouge, La.	6.75	9.25	8	*9.5
New Orleans, La.	6.75	9.25	*10	*9
Lake Charles, La.	6.75	9.25	8	*11.5
Shreveport, La.	5.5	8	8	*10
Lafayette, La.	7	9.5	8	*10
Bristol, Tenn.	10.25	9	8	13
Chattanooga, Tenn.	9.5	11.5	8	14
Knoxville, Tenn.	10	12.5	8	14.5
Memphis, Tenn.	8	10.5	8	11
Nashville, Tenn.	9	11.5	8	12

**Taxes*: New Orleans gasoline tax includes 7c state, 1c federal, and 2c parish tax. Louisiana has kerosine tax of 1c per gal.; in addition New Orleans has 1c parish tax, none of which are included in above prices.

Price basis to dealers: Undivided dealers get dealer price, less 0.5c.

Above prices include these inspection fees on both gasoline and kerosine unless otherwise specified, per gallon, figured on basis of 50 gallons per barrel:

Alabama, 1/40c on gasoline, 1/2c on kerosine; Arkansas, 1/5c per gal. in a single barrel, 1/20c per gal. in bulk; Florida 1/8c; Illinois, 3/100c; Indiana, 1/5c per gal. in lots up to 25 bbls.; 2/25c per gal. in lots of 25 bbls. or more; Kansas, 1/50c, (3/50c can be charged to meet inspection department expenses); Louisiana, 1/32c; Minnesota, 1/25c; Missouri, 3/100c; Nebraska, 3/100c; Nevada, gasoline, 1/20c; North Carolina, 1/4c; North Dakota, 1/20c; Oklahoma, 2/25c per gal. lots of more than 50, in bbls., 1/5c in lots less than 50 bbls.; South Carolina, 1/8c; South Dakota, 1/10c; Tennessee, 2/5c; and Wisconsin, 3/100c.

Kerosine inspection fee only: Iowa, 3/50c; Michigan, 1/5c per gal.

TANK WAGON MARKETS

Tank car, tank wagon, dealer, and service station prices for gasoline **do not include taxes;** *they do, however, include inspection fees as shown in general footnote. Gasoline taxes, shown in separate column, include 1c federal, and state taxes: also city and county taxes as indicated in footnotes. Kerosine tank wagon prices also do not include taxes: kerosine taxes, where levied, are indicated in footnotes. Dealer discounts are shown in footnotes; for commercial consumer discounts, see NPN for March 29, April 12, April 19 and June 7, 1939, or write to NPN. These prices in effect July 24, 1939, as posted by principal marketing companies at their headquarters offices, but subject to later correction.*

Humble Oil & Refining Co.

Humble Motor Fuel
(Regular Grade)

	*T.W.	S.S.	Gasoline Taxes	Kerosine T.W.
Dallas, Tex	8	12	5	8
Ft. Worth, Tex	8	12	5	7
Houston, Tex	9	13	5	8
San Antonio, Tex	9	13	5	8

Thriftane
(Leaded, 67 Octane, Purple Gasoline)

Dallas	7	10	5	
Ft. Worth	7	10	5	
Houston	8	11	5	
San Antonio	8	11	5	

U. S. Motor Gasoline
(Third Grade)

Dallas, Tex	6.5	..	5	
San Antonio, Tex	7	..	5	

*These tank wagon prices apply to all classes of dealers and consumers.

Continental Oil

Conoco Bronz-z-z (Regular Grade)

	††T.W.	Dealer	Gasoline Taxes	Kerosine ‡T.W.
Denver, Col	11	..	5	11.5
Grand Junction, Col	13.5	..	5	15
Pueblo, Col	11.5	..	5	9
Casper, Wyo	12.5	..	5	11.5
Cheyenne, Wyo	10.5	..	5	13
Billings, Mont	12.5	..	6	13
Butte, Mont	14	..	6	15.5
Great Falls, Mont	13.5	..	6	15.5
Helena, Mont	14.5	..	6	15.5
Salt Lake City, Utah	12.5	12.5	5	16
Boise, Ida	**14.6	*14.6	6	18
Twin Falls, Ida	**15.1	**15.1	6	18
Albuquerque, N. M	10.5	10.5	†6.5	10
Roswell, N. M	9	9	†6.5	8
Santa Fe, N. M	10.5	10.5	*7	10
Ft. Smith, Ark	9	..	5	7.5
Little Rock, Ark	9.25	..	7.5	8
Texarkana, Ark	9	..	5	8
Muskogee, Okla	8	..	5	7
Oklahoma City, Okla	8	..	5	6.5
Tulsa, Okla	8	..	5	7

Demand Gasoline
(Third Grade)

Denver, Col	10	..	5	....
Grand Junction, Col	12.5	..	5	....
Pueblo, Col	10.5	..	5	....
Casper, Wyo	11.5	..	5	....
Cheyenne, Wyo	9.5	..	5	....
Billings, Mont	11.5	..	6	....
Butte, Mont	11	..	6	....
Great Falls, Mont	10.5	..	6	....
Helena, Mont	13.5	..	6	....
Salt Lake City, Utah	11.5	11.5	5	....
Boise, Ida	**13.6	**13.6	6	....
Twin Falls, Ida	**14.1	**14.1	6	....
Albuquerque, N. M	8.5	8.5	†6.5	....
Roswell, N. M	8	8	†6.5	....
Santa Fe, N. M	9.5	9.5	*7	....
Ft. Smith, Ark	6.5	..	5	....
Little Rock, Ark	7	..	7.5	....
Texarkana, Ark	6.5	..	5	....
Muskogee, Okla	7	..	5	....
Oklahoma City, Okla	7	..	5	....
Tulsa, Okla	7	..	5	....

†Includes city tax of 0.5c.
*Includes 1c city tax.
‡Prices are in t.w. deliveries to consumers and dealers.
**Prices include 0.1c to cover 1-mill tax for toll bridges.
††T.w. prices in all states except Utah, Idaho and New Mexico are to consumers and dealers.

S. O. California

Standard Gasoline
(Regular Grade)

	T.W.	S.S.	Gasoline Taxes	Kerosine T.W.
San Francisco, Cal	13.5	14.5	4	11.5
Los Angeles, Cal	13	14	4	10
Fresno, Cal	14.5	15.5	4	12.5
Phoenix, Ariz	14	15	6	*12.5
Reno, Nev	15.5	16.5	5	13.5
Portland, Ore	14	15	6	13.5
Seattle, Wash	14	15	6	†13.5
Spokane, Wash	15.5	16.5	6	†16.5
Tacoma, Wash	14	15	6	†13.5

Flight Gasoline
(Third Grade)

San Francisco, Cal	12	13	4	....
Los Angeles, Cal	11.5	12.5	4	....
Fresno, Cal	13	14	4	....
Reno, Nev	14	15	5	....
Phoenix, Ariz	11	12	6	....
Portland, Ore	12.5	13.5	6	....
Seattle, Wash	12.5	13.5	6	....
Spokane, Wash	13	14	6	....
Tacoma, Wash	12.5	13.5	6	....

*Arizona has kerosine tax of 5c per gal., not included in above prices.
†Washington has 0.25c per gal. tax on kerosine sales, not included in above prices.
Discount to 100% dealers, thru territory, off posted t.w. prices, on gasolines: on Standard Ethyl, Standard Gasoline and Stanavo Aviation, 3c per gal.; on Flight gasoline, 2c.

Canada

PRICES OF IMPERIAL OIL LTD.
Per Imperial Gallon, which is 1.2 U. S. Gallons
3-Star Imperial Gasoline
(Regular Grade)

	T.W.	Gasoline Taxes	Kerosine T.W.
Hamilton, Ont	15	8	15.5
Toronto, Ont	15	8	15.5
Brandon, Man	21	7	22
Winnipeg, Man	19.5	7	20.5
Regina, Sask	19	7	21
Saskatoon, Sask	21.3	7	23.3
Edmonton, Alta	19.5	7	21.5
Calgary, Alta	16.5	7	18.5
Vancouver, B. C	16	7	23
Montreal, Que	14	8	14.5
St. John, N. B	13.5	10	17.5
Halifax, N. S	13.5	10	17.5

Discounts to undivided dealers, 1c off t.w. price, except Maritime Provinces where undivided dealers pay t.w. price. Divided dealers pay t.w. price, thru territory.

Aviation Gasoline

Following are tank car, tank wagon or dealer prices, as indicated, of aviation gasoline in several marketing territories.

S. O. OHIO
Thru Ohio
Esso Aviation

	Consumer T.W.	Gasoline Taxes
74 octane	15.5	5
80 octane	16.5	5
87 octane	17.5	5

Discounts: For delivery on contract to hangar operators and resellers: 2c below consumer posted t.w. price, shown above.

S. O. INDIANA
Stanavo Ethyl Aviation Gasoline
73 Octane Number

Chicago, Ill	14.9	
Detroit, Mich	16.5	4
Milwaukee, Wis	15.1	5
Minneapolis, Minn	15.3	5
St. Louis, Mo	14.5	3
Kansas City, Mo	14.2	*4
Fargo, N. D	16.5	4
Huron, S. D	15.8	5

*Includes 1c city tax.

HUMBLE OIL & REFINING CO.
74 Octane Aviation Gasoline, Clear

	Tank Car
FOB Baytown, Tex	8.5

CONTINENTAL OIL CO.
Conoco Special Gasoline

	Dealer Price	Gasoline Taxes
Denver, Colo	14.5	5
Cheyenne, Wyo	15	5
Helena, Mont	22	6
Salt Lake City, Utah	17.5	5
Albuquerque, N. M	14	*6.5

*Includes city tax of 0.5c.

S. O. CALIFORNIA
Stanavo Aviation Gasoline

	T.W.	
Phoenix, Ariz	17.5	6
Los Angeles, Cal	15	4
San Francisco, Cal	15.5	4
Reno, Nev	17.5	5
Portland, Ore	16	6
Seattle, Wash	16	6
Spokane, Wash	19	6

Note: For discounts, etc., see note under Standard and Flight gasoline above.

Naphtha (In Tank Wagon)

S. O. NEW JERSEY

	Posted Tank Wagon Prices Mineral Spirits	V.M. & P.
Newark, N. J	11.5	15.5
Baltimore, Md	15.5	....
Washington, D. C	15	....

Discounts: Buyers taking following quantities at one time, get these discounts: Newark, 2c per gal. on 200 gals. or more; less than 200 gals., 0.5c higher price. Baltimore 2c off on 25 to 100 gals. and 3c on over 100 gals. Washington, 2c off to contract buyers.

SOCONY-VACUUM OIL CO.

Buffalo, N. Y	10.5	12
*New York City	9.5	10.5
Rochester, N. Y	12	12
Syracuse, N. Y	12	14.5
Boston, Mass	11	11
Bridgeport, Conn	11	11.5
Hartford, Conn	10.5	11
Providence, R. I	11	12

*Prices apply to consumers only in quantities over 1,000 gals. annually. For quantities under 1,000 gals. annually, add 0.5c per gal.

ATLANTIC REFINING CO.

Philadelphia, Pa	11.5	12.5
Lancaster, Pa	13	14
Pittsburgh, Pa	12.5	14.5

Note: Prices for Mineral Spirits also apply to Stoddard Solvent; and prices for V.M.&P. Naphtha apply also to Light Cleaners Naphtha.

S. O. OHIO

	S.R. Solvent	V.M.&P. Naphtha
Thru Ohio	12.5	13.5

Note: V.M.&P. Naphtha prices also apply on Dry Cleaners naphtha and special Varnolene; Varnolene and Sohio Solvent 0.5c below these prices. Discounts to contract consumers off t.w. price; 300 to 999 gals., 0.5c; 1,000 to 2,499 gals., 0.75c; 2,500 to 4,999 gals., 1c; 5,000 or more gals., 1.5c.

S. O. INDIANA
(Prices include state and federal taxes)

	Oleum Spirits	V.M.&P. Naphtha	Stanisol
Chicago, Ill	16.2	16.5	15.9
Detroit, Mich	19.2	18.2	19.7
Kansas City, Mo	13.9	14.9	14.4
St. Louis, Mo	14.2	15.2	12.9
Milwaukee, Wis	18.8	19.8	19.3
Minneapolis, Minn.	19	20	17.7

Note: All prices, with exception of Missouri points, include state tax. Prices shown are base prices, before discounts.

Naphtha (In Tank Cars)

In Tank Cars (F. o. b. refinery or seaboard terminal except Ohio, delivered price.)

	V.M.&P. Naphtha	Solvent
Baltimore	10.5	9.5
New York Harbor	10	9
Philadelphia district	10.5	9
Boston	10.5	9.5
Providence	10.5	9.5
†Ohio points, delivered	8.5	*8

*This is on rubber solvent.
†In Ohio, prices on D.C. naphtha and special Varnolene are same as V.M.&P.; on Varnolene and Sohio Solvent, prices are 0.125c less than on V.M.&P.

Price Changes

Dates and amounts of changes. See table for full current prices.

S. O. New Jersey—Kerosine:

Norfolk t. w. cut 1c, July 12.

Socony-Vacuum Oil—Socony Mobilgas:

Burlington split dealer t. w. cut 1.5c, July 14.

S. O. Kentucky—Crown Gasoline:

Miami cut 0.5c, July 12.

Kyso Gasoline:

Macon cut 0.5c, July 13.
Miami cut 1c, July 12.

Kerosine:

Tampa t. w. cut 0.5c, July 10.

S. O. Indiana—Stanolind:

Mason City dealer price cut 0.5c, July 15.

Fuel Oils

S. O. New Jersey:

1939-1940 heating oil schedule established, thru North Carolina, June 1. No. 2 fuel at Charlotte and Hickory cut 0.25c.

Coming Meetings

North Carolina Oil Jobbers Assn., Ocean Terrace Hotel, Wrightsville Beach, Wilmington, N. C., Aug. 5.

Retail Gasoline Dealers Assn. of Wisconsin, 7th annual convention, Hotel Retlaw, Fond du Lac, Wis., Aug. 8, 9.

Michigan Petroleum Assn., Traverse City, Mich., some time in September.

American Institute of Mining and Metallurgical Engineers, Industrial Minerals Division, Tuscaloosa, Ala., Sept. 2, 3, 4.

American Society of Mechanical Engineers, Hotel Pennsylvania, and Engineering Societies Bldg., 29 West 39th St., New York, Sept. 4 to 8.

Oil Workers International Union, Hammond Ind., Sept. 5.

Kentucky Petroleum Marketers Assn., annual fall conference and golf tournament, Lafayette Hotel and Ashland Golf Club, Lexington, Sept. 7.

American Chemical Society, Detroit, Sept. 9 to 13.

North American Gasoline Tax Conference, annual meeting, Nicolet Hotel, Minneapolis, Minn., Sept. 11 to 13.

Montana National Bituminous Conference, Sun Valley, Idaho, Sept. 11 to 14.

National Assn. of Petroleum Retailers, Des Moines, Iowa, Sept. 11 to 14.

American Chemical Society, Boston, Mass., Sept. 11 to 15.

National Petroleum Assn., 37th annual meeting, Hotel Traymore, Atlantic City, N. J., Sept. 13, 14, 15.

Oil Trades Assn. of New York, sports day, Pelham Country Club, Pelham, N. Y., Sept. 19.

New Jersey Oil Trades Assn., fall outing, Sept. 28.

Society of Automotive Engineers, Hotel Schroeder, Milwaukee, Sept. 28, 29.

National Lubricating Grease Institute, Stevens Hotel, Chicago, Oct. 2, 3.

American Institute of Mining and Metallurgical Engineers, Petroleum Division, Galveston, Tex., Oct. 4, 5, 6.

Texas Mid-Continent Oil & Gas Assn., 20th annual meeting and convention, Rice Hotel, Houston, Tex., Oct. 5, 6, 7.

Society of Automotive Engineers, National Aircraft production meeting, Ambassador Hotel, Los Angeles, Calif., Oct. 5, 6, 7.

American Gas Assn., annual convention, New York, Oct. 9, 10.

Society of Automotive Engineers, Annual dinner, Hotel Pennsylvania, New York, Oct. 16.

Independent Petroleum Assn. of America, 10th annual meeting, Ft. Worth, Tex., Oct. 18-20.

National Tax Conference, Palace Hotel, San Francisco, week of Oct. 16.

40th Annual National Automobile Show, Grand Central Palace, New York, week of Oct. 15.

National Safety Congress and Exposition, Convention Hall, Atlantic City, N. J., Oct. 16 to 20.

American Institute of Mining and Metallurgical Engineers, Petroleum Division, Los Angeles, Oct. 19, 20.

Western Petroleum Refiners Assn., regional technical meeting, Allis Hotel, Wichita, Kan., Oct. 5.

West Virginia Petroleum Assn., second annual meeting, Hotel Daniel Boone, Charleston, W. Va., Oct. 25.

Society of Automotive Engineers Transportation & Maintenance Meeting, Coronado Hotel, St. Louis, Mo., Oct. 26, 27.

Colorado Petroleum Industries Committee, annual convention, Shirley-Savoy Hotel, Denver, Oct. 27.

Western Petroleum Refiners Assn., regional technical meeting, Washington-Youree Hotel, Shreveport, La., Oct. 27.

Oil Trades Assn. of New York, annual banquet, Waldorf-Astoria Hotel, New York, Nov. 1.

Society of Automotive Engineers Fuel & Lubricants Meeting, Mayo Hotel, Tulsa, Okla., Nov. 2, 3.

National Motor Truck Show, Navy Pier, Chicago, Nov. 8-16.

American Petroleum Institute, 20th annual meeting, Stevens Hotel, Chicago, Nov. 13-17.

American Institute of Chemical Engineers, 32nd annual meeting, Providence-Biltmore Hotel, Providence, R. I., Nov. 15, 16, 17.

American Society of Mechanical Engineers, Philadelphia, Pa., Dec. 4 to 7.

17th Exposition of Chemical Industries, Grand Central Palace, New York, Dec. 4 to 9.

West Central Texas Oil & Gas Assn., Abilene, Tex., some time in December.

1940

Society of Automotive Engineers, Annual Meeting and Engineering Display, Book-Cadillac Hotel, Detroit, Jan. 15 to 19.

American Institute of Mining and Metallurgical Engineers, New York, Feb. 12 to 15.

Kentucky Petroleum Marketers Assn., 14th annual meeting and convention, Brown Hotel, Louisville, Ky., Feb. 14, 15.

Ohio Petroleum Marketers Assn., Deshler-Wallick Hotel, Columbus, O., Feb. 27, 28 and 29.

American Assn. of Petroleum Geologists, Stevens Hotel, Chicago, April 10, 11, 12.

American Petroleum Institute, Eastern District, Division of Production, Columbus, O., April 11, 12.

National Petroleum Assn., 37th semi-annual meeting, Hotel Cleveland, Cleveland, O., Apr. 18, 19.

Natural Gasoline Assn. of America, 19th annual convention, Hotel Tulsa, Tulsa, May 15, 16, 17.

TANK WAGON MARKETS, HEATING OILS

Prices in Effect July 24, 1939

Following are posted tank wagon prices of various grades of heating oil at the points shown in various territories. Prices are in cents per gallon.

	No. 1	No. 2	No. 4
S. O. NEW JERSEY			
Atlantic City, N. J.	7.0	5.75	5.75
Newark	7.0	5.75	5.75
Annapolis, Md	....	6.5	....
Baltimore	6.75	6.25	5.75
Washington, D. C.	7.00	6.50	6.50
Norfolk, Va	7.0	6.0	6.0
Petersburg	7.25	6.25	....
Richmond	7.25	6.25	6.25
Charlotte, N. C.	8.75	7.5	....
Hickory	....	8	....
Raleigh	8.75	7.25	....
Charleston, S. C.	8.5	7.0	....
Columbia	9.5	8.0	....
Spartanburg	10.2	8.7	....

SOCONY-VACUUM OIL CO. INC.
(S. O. New York Division)

	No. 2	No. 3	No. 4
New York City	5.75	5.75	5.75
Albany, N. Y.	5.75	5.75	5.25
Rochester, N. Y.	6.75	6.75	6.75
Boston, Mass.	5.50	5.50	5.50
Bangor, Me.	6.00	6.00	6.00
Manchester, N. H.	6.00	6.00	6.00
Burlington, Vt.	6.25	6.25	6.25
Hartford, Conn.	6.00	6.00	6.00
New Haven, Conn.	5.50	5.50	5.50
Providence, R. I.	5.50	5.50	5.50

Note: Prices for No. 1 fuel in Socony-Vacuum territory same as for kerosine which see in tank wagon table for various cities; prices change with kerosine.

ATLANTIC REFINING

	Numbers					
	1	2	3	4	5	6
Phila., Pa.	7.75	6.0	6.0	6.0	3.75	3.00
Allentown, Pa.	8.5	6.5	6.5	6.5	....	....
Wilmington, Del.	7.75	5.5	5.5	5.5	....	....
Springfield, Mass.	7.0	5.5	....	....	....	....
Worcester, Mass.	7.0	5.50	....	5.50	....	....
Hartford, Conn.	6.5	6.0	....	6.0	....	....

S. O. OHIO

	No. 1	No. 2	No. 3
Columbus Division and Cleveland	7.50	7.50	7.00
City of Lima	8.00	8.00	7.00
Rest of Ohio	8.00	8.00	7.50

Note: S. O. Ohio prices are for full compartment hose dumps, bucket dumps are 0.5c per gallon higher.

S. O. INDIANA
Stanolex Fuel and Furnace Oils

	No. 1 Fuel	Stanolex Furnace
Chicago	(a)6.75	6.75
Indianapolis	....	(b)7.8
Detroit	....	7.1
Milwaukee	8.4	7.7
Minneapolis	7.8	7.8
St. Louis	7.7	(c)6.7
Kansas City	6.8	6.8

(a) For 400 gals. and over; 150 to 399 gals., 7.25c; 1 to 149 gals., 8.25c.

(b) Excluding 4c state tax.

(c) For 400 gals. & over; 100 to 399 gals., 7c; 1 to 99 gals., 8c.

Note: Small-lot deliveries of light fuel oils range up to 2c higher than above quotations.

TRADEMARKS

The following are trademark applications pertinent to our field pending in the United States Patent Office which have been passed for publication and are in line for early registration unless opposition is filed promptly. For further information address National Trade-Mark Company, Munsey Building, Washington, D. C., trademark specialists.

As an additional service feature to its readers, this journal gladly offers to them an advance search free of charge on any mark they may contemplate adopting or registering. You may communicate with the Editor of this Department, or send your inquiry direct to the National Trade-Mark Company, stating that you are a reader of this journal.

EDGOL, Serial No. 419,196. Francis R. Nichols, doing business as Edgol Company, Baltimore, Md. Filed May 8, 1939. For preservative oil for razor blades and the like. Published July 18, 1939.

KOLZOL, Ser. No. 419,824. Vegetable Oil Products Company, Inc., Wilmington, Calif. Filed May 25, 1939. For oils and greases for use in manufacturing and composition of lubricating oils and greases. Published July 18, 1939.

FLEXOL, Ser. No. 410,974. Carbide and Carbon Chemicals Corporation, New York, N. Y. Filed Sept. 22, 1938. For Plasticizers for imparting flexibility to resins and plastics. Published July 18, 1939.

Group 3 Freight Rates

To Division Headquarters Points of Standard Oil Co. of Indiana

	Gasoline-Kerosine Cents per Cwt.	Gasoline-Kerosine Cents per gal. 6.6 lbs.	Distillate-Gas Oil-Fuel Oil Cents per Cwt.	Distillate-Gas Oil-Fuel Oil Cents per gal. 7.4 lbs.
Chicago, Ill.	40	2.640	32	2.368
Decatur, Ill.	39	2.574	31	2.294
Joliet, Ill.	40	2.640	32	2.368
Peoria, Ill.	39	2.574	31	2.294
Quincy, Ill.	36	2.376	29	2.146
Indianapolis, Ind.	48	3.168	39	2.886
Evansville, Ind.	46	3.036	37	2.738
South Bend, Ind.	53	3.498	42	3.108
Detroit, Mich.	64	4.224	51	3.774
Gd. Rapids, Mich.	62	4.092	50	3.700
Saginaw, Mich.	66	4.356	53	3.922
Green Bay, Wis.	51	3.366	41	3.034
Milwaukee, Wis.	43	2.838	34.5	2.553
LaCrosse, Wis.	46	3.036	37	2.738
Min'ap'ls-St. Paul	46	3.036	37	2.738
Duluth, Minn.	52	3.432	41.5	3.071
Mankato, Minn.	46	3.036	37	2.738
Des Moines, Ia.	36	2.376	29	2.146
Davenport, Ia.	39	2.574	31	2.294
Mason City, Ia.	42	2.772	33.5	2.479
St. Louis, Mo.	33	2.178	26.5	1.961
Kansas City, Mo.	28	1.848	22.5	1.665
St. Joseph, Mo.	28	1.848	22.5	1.665
Fargo, N. D.	63	4.158	50.5	3.737
Minot, N. D.	83	5.478	66.5	4.921
Huron, S. D.	53	3.498	42.5	3.145
From Ponca City	13	*0.858	13	†0.858
Wichita				
From Tulsa	21	*1.386	21	†1.386
From Cushing	19	*1.254	19	†1.254

*This rate also includes distillate rate at 6.6 lbs. per gal.

†This rate is exclusive of distillate which is based on 6.6 lbs. per gal. from Ponca City, Tulsa and Cushing, Okla., to Wichita. Includes only gas oil and fuel oil.

NOTE: There is no Group 3 rate to Wichita, Kans.

SEABOARD MARKETS, EXPORT AND COASTWISE

All prices on this page are publisher's opinion of open market quotations or sales, for spot shipment (10 to 15 days). In cargo markets, spot shipment is 90 days. Prices in cents per gallon, except heavy fuel oil in dollars per barrel, in tank car lots, f.o.b. refineries or seaboard terminals in districts designated, unless otherwise noted. Federal, state or municipal taxes not included. Prices quoted apply on products made from legally produced crude. Unless otherwise noted, gasoline octane ratings are determined by C.F.R. Motor method, A.S.T.M. D-357-33T; and lubricating oil specifications determined according to A.S.T.M. methods, unless otherwise noted.

Eastern Domestic

(Inter-refinery and export prices not included.)

MOTOR GASOLINE

Prices Effective	July 24	
District:	60-64 Oct.	65 Oct. & Above
N. Y. harbor	5.75 – 5.90	6.00 – 6.25
(a) N. Y. harbor	5.75	(b) 5.75 –6.00
Philadelphia	5.75 – 6.50	6.00 – 6.50
Baltimore	(n)5.75	6.00 – 7.00
Norfolk	6.125– 6.375	6.25 – 6.75
Wilmington, N. C.	6.00 – 6.25	6.25 – 7.00
Charleston, S. C.	6.00 – 6.50	6.50 – 7.00
Savannah	(n) 5.75 –6.375	6.25 – 6.75
Jacksonville	5.75 – 6.375	6.25 – 6.75
Portland	(o)	6.50
Boston	(n)6.25	6.00 – 6.45
Providence	6.00 – 6.25	6.00 – 6.50

WATER WHITE KEROSINE

District:			
N. Y. harbor	4.25 – 4.375	Charleston	4.75–5.25
(a) N. Y. harbor	4.125– 4.25	Savannah	5.00-5.125
Philadelphia	4.50 – 4.75	Jacksonville	5.00-5.125
Baltimore	4.75	Portland	4.375
Norfolk	4.75 –4.875	Boston	4.375
Wilmington, N.C.	4.75 – 5.00	Providence	4.25–4.375

(b) FUEL OILS

	N. Y. harb.	N. Y. barb. barges
No. 1	4.25 – 4.375	4.125– 4.25
Nos. 2-3	3.875	3.75
No. 4	3.625– 3.875	3.50 – 3.75
No. 5	(m) $1.25	
No. 6	$1.05	

	Phila. dist.	Balt. dist.
No. 1	4.50 – 4.75	4.75
Nos. 2-3	4.25	4.25
No. 4	4.00 – 4.25	4.25
No. 5	$1.25	$1.25
No. 6	$1.05	$1.05

	Bost. dist.	Prov. dist.
No. 1	4.25 – 4.375	4.25 – 4.375
Nos. 2-3	4.00	3.875
No. 4	3.875 – 4.00	3.875
No. 5	$1.35	(n)$1.30
No. 6	$1.05	$1.05

District:	(c) Bunker C Fuel	(c) Diesel Oil
N. Y. harbor	$1.05	$1.65 –$1.70
Philadelphia	$1.05	$1.65
Baltimore	$1.05	$1.65
Norfolk	$1.05	$1.65
Charleston	$1.00	$1.65 –$1.75
Savannah	$1.00	$1.785
Jacksonville	$1.00	$1.785
Tampa	$0.95	$1.785
Portland	$1.05	$1.75
Boston	$1.05	$1.65
Providence	$1.05	$1.65

	Diesel Oil Shore Plants	Gas Oil 28-34 Gravity
New York harbor	3.75 – 4.00	3.875– 4.125
Philadelphia dist	4.25	4.25
Baltimore dist	4.25	4.25
Norfolk dist	4.25	4.25
Charleston dist	4.25	4.25
Jacksonville dist	4.25	
Tampa dist	4.25	
Portland dist	4.00	4.375
Boston dist	3.9'9 4.00	4.00 – 4.125
Providence dist	3.875 4.00	4.125

Pacific Export

(e) (Quotations are at seaboard, Los Angeles, in cargo lots, cents per gal., except where otherwise noted.)

Prices Effective	July 24	July 17
U. S. Motor, under 65 oct.	4.25 – 4.375	4.25 – 4.375
400 e.p. blend, under 65 oct	4.375– 4.50	4.375– 4.50
400 e.p. blend 65 oct. & above	4.50 – 4.75	4.50 – 4.75
(d) 38-40 gravity, w.w. kerosine	4.25 – 4.50	4.25 – 4.50
41-43 gravity, w.w. kerosine	4.50 – 4.75	4.50 – 4.75
44 gravity, w.w. kerosine	5.00 – 5.25	5.00 – 5.25

Prices Effective	July 24	July 17
In Cargo lots, per bbl.		
Diesel fuel, 24 & above	$0.95 –$1.05	$0.95 –$1.05
Diesel fuel, under 24	$0.85 –$0.90	$0.85 –$0.90
(f) 30-34 gravity, diesel (gas oil)	$1.05 –$1.20	$1.05 –$1.20
(g) Grade C fuel oil	$0.58 –$0.65	$0.58 –$0.65
In Ships' Bunkers, or deep tank lots, per bbl.:		
(f) Diesel fuel oil	$1.30 –$1.45	$1.35 –$1.45
(g) Grade C fuel oil	$0.70 –$0.90	$0.70 –$0.90
Cased Goods: (Per case		
U. S. Motor	$1.35 –$1.45	$1.35 –$1.45
400 e.p. blend, under 65 octane	$1.40 –$1.50	$1.40 –$1.50
375-400 e.p. blend, 65 oct. & above	$1.50 –$1.60	$1.50 –$1.60
(d) 40-43 gravity, w.w. kerosine	$1.30 –$1.40	$1.30 –$1.40
Kerosine, p.w.	$1.25 –$1.35	$1.25 –$1.35

New York Export

(Cents per gal. in bbls. FAS. New York)

CYLINDER OILS (Pennsylvania Products)

Bright stock:		
Light, 25 p.t.	23.00	23.00
Neutral oil:		
200 3 color, 25 p.t.	24.00	24.00
150 3 color, 25 p.t.	22.00	22.00
600 s.r., unfiltered	15.50	15.50
650 s.r., unfiltered	17.50	17.50
600 fl., s.r.	18.00	18.00
630 fl., s.r.	20.50	20.50

Wax, Domestic *and* Export

(A.S.T.M. Tests. Melting points, however, are A.M.P., 3 higher than E.M.P. Export prices, FAS., carloads. Domestic prices, FOB. refineries, in bags, carloads, with 0.2c discount allowed for shipment in bulk, except where noted below. Scale solid; fully refined, slabs in bags)

Prices Effective	July 24	
	New York	
	Domestic	Export
124-6 Y.C. scale	2.75 – 3.00	2.75 – 3.00
122-4 W.C. scale	2.85 – 3.00	2.85 – 3.00
124-6 W.C. scale	2.85 – 3.00	2.85 – 3.00
123-5 Fully rfd.	4.00	3.625
125-7 Fully rfd.	4.15	3.75
128-30 Fully rfd.	(h)4.25	4.00
130-2 Fully rfd.	(h)4.60	4.25
133-5 Fully rfd.	(h)4.90	4.65
135-7 Fully rfd.	(h)5.15	5.00
	New Orleans	
	Domestic	Export
124-6 Y.C. scale	2.75 – 3.00	2.75 – 3.00
122-4 W.C. scale	2.80 – 3.00	2.80 – 3.00
124-6 W.C. scale	2.80 – 3.00	2.80 – 3.00
123-5 Fully rfd.	4.00	3.625
125-7 Fully rfd.	4.15	3.75
128-30 Fully rfd.	(h)4.25	4.00
130-2 Fully rfd.	(h)4.60	4.25
133-5 Fully rfd.	(h)4.90	4.65

Gulf Coast

(FOB. ship at Gulf for domestic and export shipment; minimum 20,000 bbls.; representing traders' opinions)

MOTOR GASOLINE

July 24	60-62 Gravity, 400 e.p.	61-63 Gravity, 390 e.p.	64-66 Gravity, 375 e.p.
60 octane	4.50 – 4.625	4.50 – 4.625	4.50 – 4.75
65 octane	4.75 – 5.00	4.75 – 5.00	4.75 – 5.00
67 octane	(q)5.00	(q)5.00	(q)5.00
68 octane	5.00 – 5.25	5.00 – 5.25	5.00 –5.25
70 octane	5.00 – 5.50	5.125– 5.50	5.125–5.50
72-74 oct.	5.25 – 5.50	5.25	5.25

Prices Effective	July 24	July 17
KEROSINE		
44 gravity, w.w.	3.75 – 3.875	3.75 – 3.875
41-43 gravity, w.w.	3.50 – 3.625	3.50 – 3.625
41-43 gravity, p.w.	3.50 – 3.625	3.50 – 3.625

Prices Effective	July 24	July 17
GAS AND BUNKER OILS		
Gas Oil (i):		
Below 43 diesel index	3.125	3.125
43-47 diesel index	3.25	3.25
48-52 diesel index	3.25 – 3.375	(p)3.25
53-57 diesel index	3.375– 3.50	3.375– 3.50
58 & above	3.50	3.50
LIGHT FUEL OILS		
No. 1	3.50	3.50
No. 2	3.125– 3.25	3.125– 3.25
DIESEL and BUNKER OILS		
(c) Diesel Oil	$1.45	$1.45
(c) Grade C bunker oil	$0.80 –$0.85	$0.80 –$0.85
Grade C bunker oil, in cargoes	$0.78 –$0.80	$0.78 –$0.80

MID-CONTINENT LUBRICATING OILS

(Cents per gal. at Gulf; in bbls., FAS.; in bulk, FOB terminals)

	July 24 (j) Barrels	Bulk
190-200 vis. D. 210 brt. stock	22.00	17.80
150-160 vis. D 210 brt. stock:		
0-10 p.p.	18.50 –19.00	14.25 –14.30
10-25 p.p.	18.00 –18.50	13.75 –13.80
150-160 vis. E. 210 brt. stock	18.00	13.80
120 vis. D 210 brt. stock	17.25 –17.50	13.00 –14.50

	July 24 Bulk	July 17 Bulk
180 vis. No. 3 color neutral:		
0-10 p.p.	10.05 –11.50	10.05 –11.50
15-30 p.p.	9.55 –11.00	9.55 –11.00
200 vis. No. 3 color neutral:		
0-10 p.p.	10.80 –12.00	10.80 –12.00
15-30 p.p.	10.30 –11.50	10.30 –11.50
600 s.r. olive green	9.00 –11.25	9.00 –11.25
600 s.r. dark green	7.00 – 9.25	7.00 – 9.25

SOUTH TEXAS LUBRICATING OILS

(Vis. at 100° cold test 0, bulk export shipment, FOB terminals.)

Unfiltered Pale Oils: Vis.	Color		
100	No. 3	4.50 – 4.75	4.50 – 4.75
200	No. 3	6.00 – 6.25	6.00 – 6.25
300	No. 3	6.50 – 6.75	6.50 – 6.75
500	No. 3½	7.50	7.50
750	No. 4	8.00 – 8.25	8.00 – 8.25
1200	No. 4	8.375– 8.75	8.375– 8.75
2000	No. 4	8.50 – 9.00	8.50 – 9.00
Red Oils: Vis.	Color		
100	No. 5-6	4.50 – 4.75	4.50 – 4.75
200	No. 5-6	6.00 – 6.25	6.00 – 6.25
300	No. 5-6	6.50 – 6.75	6.50 – 6.75
500	No. 5-6	7.50	7.50
750	No. 5-6	8.00 – 8.25	8.00 – 8.25
1200	No. 5-6	8.375– 8.75	8.375– 8.75
2000	No. 5-6	8.50 – 9.00	8.50 – 9.00

Note: Red oil prices cover oils with green cast; prices for blue cast red oils are slightly lower in some cases.

Tanker Rates

(Approximate freight rates to Continental ports shillings per ton of 2240 lbs., British sterling; U. S. ports cents per bbl.)

Rates Effective July 24

	Crude & /or Fuel		Refined Oil & /or Spirits	
	Last Paid	Owners Ask	Last Paid	Owners Ask
Gulf-U.K./Cont.(k)	11/9	10/6 to 11/-	11/-	10/6-to 11/-
Aruba-U.K./Cont. (k)	9/-	9/-to 10/-	9/-	9/-to 10/-
Gulf-N. Atlantic(l) (not E. of N.Y.): Hvy. Crude & fuel, (10 to 19.9 gravity)	17c	17	....	....
Light Crude, (30 Grav. or Lighter)	16c	15	....	....
Gasoline	....	....	14.5c	14.5-15c
Kerosine	....	....	15c	15.5-16c
Light Fuel	....	....	16c	16.5-17c

(a) In barge lots. (b) Fuel oils meet specifications of U. S. Commercial standards CS12-35. (c) Ships' bunkers. Lighterage, additional at some points, not included. (d) 150 fire point. (e) For San Francisco cargo prices, add 5c per bbl. to cargo prices shown above. (f) Pacific Specification 200. (g) Pacific Specification 400. (h) Shipment in bags or in bulk. (i) Less than ½ of 1% sulfur. (j) Second-hand barrels. (k) Continental ports in range between Bordeaux and Hamburg, both inclusive. (l) Venezuela loading, same rate: Tampico, 2c to 3c per bbl. additional. (m) Low pour test, low viscosity, No. 5 generally quoted at $1.35. (n) One refiner quoting. (o) No prices reported. (p) Sales. (q) Two refiners quoting.

CRUDE OIL MARKETS

Prices in $ per bbl. of 42 U. S. gals. at the well. A. P. I. gravity. Prices are effective as of 7 a. m. of dates as given

EASTERN FIELDS

Posted by Joseph Seep Purchasing Agency

(Effective March 6, 1939, except Corning Jan. 24, 1939)

Penna. Grade Oil in Southwest Penna. Pipe Lines.....$1.65
Penna. Grade Oil in Eureka Pipe Lines (West Virginia).....$1.59
Penna. Grade Oil in Buckeye Pipe Lines (Macksburg, O.).....$1.55
Corning Oil in Buckeye Pipe Lines (Ohio)..$1.02

Posted by Other Companies

Tide Water Associated Oil Co.
Bradford-Allegany district (Penna. and N. Y.) (Effective March 6, 1939).....$2.00
*The Pennzoil Co.: (Effective March 6, 1939)
Penna. Grade Oil in National Transit Lines *1 93
*The Pennzoil Co. posts $1.93 in Cochran, Franklin, Hamilton and Doolittle, Pa. fields, prices in other lower districts range down to $1.88 per bbl. at well.

MICHIGAN

Posted by Pure Oil Co.

Midland, Midland County (April 17, 1939)...$0.975

Posted by Simrall Corp.

(Effective April 20, 1939)

Crystal, Greendale, Porter and Wise.....$0.975
Beaverton, Buckeye, Bentley, Edenville.....$0.95
Freeman.....$0.89

(Effective April 18, 1939)

West Branch, Arenac, and equal grades....$0.74

Posted by Bay Pipe Line Corp.

(Effective April 20, 1939)

Bentley and Buckeye.....$0.95
Saginaw and Wise.....$0.975

CENTRAL STATES FIELDS

Posted by Ohio Oil Co.

(Effective June 8, 1939)

Illinois and Western Indiana.....$0.95
Illinois Basin.....$1.05

Posted by Sohio Corp.

(Effective June 8, 1939)

Illinois Basin.....$1.05

(Effective July 15, 1939)

Griffin (Ind.) pool, sand wells.....$0.85
Griffin (Ind.) pool, McCloskey lime.....$0.80

Posted by Carter Oil Co.

(Effective June 10, 1939)

Louden, Fayette County, Ill.....$1.05

Posted by Ashland Oil & Transportation Co.

(Effective June 9, 1939)

Somerset Oil in Ashland Lines, Kentucky:
Big Sandy River.....$1.02
Kentucky River.....$1.10

Posted by Stoll Oil Refining Co.

(Effective June 10, 1939)

Stoll Pipe Line Oil (Ky.).....$0.90

Posted by Fordsville Gathering Line, Inc.

Western Kentucky

(Effective June 9, 1939)

Birk City Area.....$0.90
Owensboro Area.....$1.00
Corydon Area (Henderson).....$0.90

CANADIAN FIELDS

Posted by Imperial Oil Limited

Western Ontario

(Effective Oct. 25, 1938)

Petrolia.....$1.90
Oil Springs.....$1.97

Alberta—Turner Valley

(Prices f.o.b. field tankage)

(Effective Jan. 5, 1938)

Crude Oil			
40-40.9°	$1.14	53-53.9	$1.40
41-41.9	1.16	54-54.9	1.42
42-42.9	1.18	55-55.9	1.44
43-43.9	1.20	56-56.9	1.46
44-44.9	1.22	57-57.9	1.48
45-45.9	1.24	58-58.9	1.50
46-46.9	1.26	59-59.9	1.52
47-47.9	1.28	60-60.9	1.54
48-48.9	1.30	61-61.9	1.56
49-49.9	1.32	62-62.9	1.58
50-50.9	1.34	63-63.9	1.60
51-51.9	1.36	64-64.9	1.62
52-52.9	1.38		

Crude Naphtha, 65 grav. & above.....$2.14

Absorption Gasoline	
90% Rec., 20 lb. Reid v.p.	$1.94
90% Rec., 17 lb. Reid v.p.	$2.08

MID-CONTINENT

Oklahoma-Kansas

*(Effective Oct. 11 to 22, 1938; and Feb. 16, 1939)

	S. O. Indiana	Carter Mag-nolia Shell	Conti-nental Texas Co.	Sin-clair-Prairie
Below 21°	$0.70	$0.60	....	....
21-21.9	.72	.63	....	....
22-22.9	.74	.66	....	....
23-23.9	.76	.69	....	....
24-24.9	.78	.72	....	....
25-25.9	.80	.75	....	$0.58
26-26.9	.82	.78	....	.63
27-27.9	.84	.81	....	.68
28-28.9	.86	.84	$0.86	.73
29-29.9	.88	.87	.88	.78
30-30.9	.90	.90	.90	.82
31-31.9	.92	.92	.92	.86
32-32.9	.94	.94	.94	.90
33-33.9	.96	.96	.96	.96
34-34.9	.98	.98	.98	.98
35-35.9	1.00	1.00	1.00	1.00
36-36.9	1.02	1.02	1.02	1.02
37-37.9	1.04	1.04	1.04	1.04
38-38.9	1.06	1.06	1.06	1.06
39-39.9	1.08	1.08	1.08	1.08
40 & above	1.10	1.10	1.10	1.10

*Effective by Carter Oil, Oct. 13, posting in Okla. only; Continental Oil, Oct. 11, with lowest grade below 29; Magnolia, Oct. 12, posting in Okla. only; Shell, Oct. 22; Sinclair-Prairie, Feb. 16, 1939; S. O. Indiana, Oct. 17; The Texas Co., Oct. 12.

North-North Central and Central Texas

*Effective 1938:	Stano-lind Oct. 17	(Sinclair-Prairie Oct. 11	*Texas Co. *Conti-nental *Magnolia
Below 21°	$0.60	....	....
21-21.9	.62	....	....
22-22.9	.64	....	....
23-23.9	.66	....	....
24-24.9	.68	$0.76	$0.79
25-25.9	.70	for	for
26-26.9	.72	oil	oil
27-27.9	.74	below	below
28-28.9	.76	29°.	29°.
29-29.9	.78	.78	.81
30-30.9	.80	.80	.83
31-31.9	.82	.82	.85
32-32.9	.84	.84	.87
33-33.9	.86	.86	.89
34-34.9	.88	.88	.91
35-35.9	.90	.90	.93
36-36.9	.92	.92	.95
37-37.9	.94	.94	.97
38-38.9	.96	.96	.99
39-39.9	.98	.98	1.01
40 & above.	1.00	1.00	1.03

*Effective Oct. 11, by Continental, in North Tex.; Oct. 12, by Texas Co. in North & North Central Texas. Texas Co.'s lowest grade is 28-28.9, at $0.79; by Magnolia, Dec. 3, in N. and N. Central Texas.
†Sinclair-Prairie prices are in N. Cent. Texas and Mexia.

Jefferson County, Texas

Posted by Magnolia Petroleum Co.

Beaumont

(Effective Oct. 12, 1938)

Below 20°	$0.79	30-30.9	$1.08
20-20.9	.82	31-31.9	1.10
21-21.9	.85	32-32.9	1.12
22-22.9	.88	33-33.9	1.14
23-23.9	.91	34-34.9	1.16
24-24.9	.94	35-35.9	1.18
25-25.9	.97	36-36.9	1.20
26-26.9	1.00	37-37.9	1.22
27-27.9	1.02	38-38.9	1.24
28-28.9	1.04	39-39.9	1.26
29-29.9	1.06	40 & above	1.28

*For below 21°.

Oct. 11, '38, Stanolind Oil & Gas Co. posted same gravity and price schedule in West Beaumont field as Magnolia.

TEXAS FIELDS

Posted by Humble Oil & Refining Co.

**West Central Texas*

(Effective Dec. 3, 1938)

24-24.9	$0.71	33-33.9	$0.89
25-25.9	.73	34-34.9	.91
26-26.9	.75	35-35.9	.93
27-27.9	.77	36-36.9	.95
28-28.9	.79	37-37.9	.97
29-29.9	.81	38-38.9	.99
30-30.9	.83	39-39.9	1.01
31-31.9	.85	40 & above	1.03
32-32.9	.87		

*Includes Brown, Callahan, Coleman, Comanche, Eastland, Fisher, Haskell, Jones, Shackelford, Stephens, Throckmorton and Young Counties.

Note: Effective Oct. 1, 1937, Humble prices are based on 100% tank tables at 60F.

**East Central Texas*

(Effective Oct. 11, 1938)

23-23.9	$0.78	32-32.9	$0.96
24-24.9	.80	33-33.9	.98
25-25.9	.82	34-34.9	1.00
26-26.9	.84	35-35.9	1.02
27-27.9	.86	36-36.9	1.04
28-28.9	.88	37-37.9	1.06
29-29.9	.90	38-38.9	1.08
30-30.9	.92	39-39.9	1.10
31-31.9	.94	40 and above	1.12

Posted by Pan American Pipe Line Co.

(Effective Feb. 15, 1939)

Cayuga, Anderson county.....$0.68
*Including Anderson, Cherokee, Limestone, Navarro counties.

PANHANDLE TEXAS

Posted by Humble Oil & Refining Co.

(Effective Dec. 3, 1938)

	Gray County	Carson-Hutchinson
28-28.9	$0.72	$0.67
29-29.9	.74	.69
30-30.9	.76	.71
31-31.9	.78	.73
32-32.9	.80	.75
33-33.9	.82	.77
34-34.9	.84	.79
35-35.9	.86	.81
36-36.9	.88	.83
37-37.9	.90	.85
38-38.9	.92	.87
39-39.9	.94	.89
40 & above	.96	.91

Effective Oct. 11, 1938, Sinclair Prairie posted same prices in Panhandle Texas as Humble posted Dec. 3. Dec. 3, Magnolia met Humble.

EAST TEXAS

Gulf, Humble, Magnolia, Sinclair Prairie, Stanolind, Texas Co., Tide-Water Associated.....$1.10
*Effective Oct. 11 by Humble, Sinclair Prairie, and Stanolind; Oct. 12 Magnolia, Texas, Tide Water; Oct. 13 by Gulf.

NORTHEAST TEXAS

(Posted by Humble, Oct. 11, 1938)

Talco.....$0.55

(Posted by Magnolia, Oct. 12, 1938)

Cass County and Panola County, Tex.:
Same gravity and price schedule as S. O. Louisiana posts for N. La.-Ark. Crude, which see under that company.

(Posted by The Texas Co., Oct. 12, 1938)

Cass County.....$1.05

WEST TEXAS and NEW MEXICO

(a) (Effective Oct. 11, 1938 to March 24, 1939)

	Humble	Mag-nolia Stano-lind	Shell	Texas Co. Sinclair
Below 20°	$0.53	(b)	$0.53	(c)
20-20.9	.55	....	.55	....
21-21.9	.57	....	.57	....
22-22.9	.59	....	.59	....
23-23.9	.61	....	.61	....
24-24.9	.63	....	.63	....
25-25.9	.65	....	.65	.65
26-26.9	.67	.67	.67	.67
27-27.9	.69	.69	.69	.69
28-28.9	.71	.71	.71	.71
29-29.9	.73	.73	.73	.73
30-30.9	.75	.75	.75	.75
31-31.9	.77	.77	.77	.77
32-32.9	.79	.79	.79	.79
33-33.9	.81	.81	.81	.81
34-34.9	.83	.83	.83	.83
35-35.9	.85	.85	.85	.85
36-36.9	.87	.87	.87	.87
37-37.9	.89	.89	for	for
38-38.9	.91	.91	oil	oil
39-39.9	.93	.93	36° &	36° &
40 & above	.95	.95	above.	above.

Pecos County, West Texas

(Posted by Humble and Shell, Oct. 11, 1938)

Pecos.....$0.78
Yates Shallow Pool (Shell).....65

(a) Effective by Humble Oil & Refg., Shell Oil, Stanolind Oil & Gas, and Sinclair Prairie, Oct. 11, 1938; by Magnolia Petroleum and The Texas Co., Oct. 12, 1938. On March 24, 1939, Sinclair Prairie revised its posting from 40 & above, to 36 & above, at $0.87.

(b) Magnolia posts $0.63 for below 25; $0.65 for 25-25.9. Stanolind posts $0.65 for below 26.

(c) Texas Co. posts $0.65 for below 26; Sinclair Prairie, $0.63 for below 25.

Note: Humble's postings are in these counties: Andrews, Crane, Crockett, Ector, Gaines, Glasscock, Howard, Reagan, Upton, Winkler and Yoakum, West Texas; and Lea county, N. Mex.; Magnolia's are in Crane, Glasscock, Howard, Mitchell, Upton and Winkler; Shell, in Crane, Ector, Glasscock, Howard, Upton, Winkler, Lea; Stanolind in Hendrick field, Winkler county; Texas Co. in Ward, Winkler and Lea; Sinclair in W. Texas and Lea.

Posted by Sinclair Prairie Oil Marketing Co.

(Effective Oct. 11, 1938)

Eddy county, N. Mex.....$0.77

Posted by Continental Oil Co.

(Effective Oct. 11, 1938)

Artesia, Jackson and Maljamar pools, New Mexico: gravity schedule beginning with below 29, at $0.61; 29-29.9, at $0.63; plus 2c differential for each gravity, up to 40 & above, at $0.85.

COLORADO

Posted by Continental Oil Co.

(Effective Oct. 11, 1938)

Ft. Collins and Wellington

Below 29	$0.81	35-35.9	$0.95
29-29.9	.83	36-36.9	.97
30-30.9	.85	37-37.9	.99
31-31.9	.87	38-38.9	1.01
32-32.9	.89	39-39.9	1.03
33-33.9	.91	40 & above	1.05
34-34.9	.93		

Canon City and Florence, Col.....$0.90

SOUTH AND SOUTHWEST TEXAS

All Shown Below Posted by Humble Oil & Refining Co.

(Effective Oct. 11, 1938)

Carroll, Clark, Darst Creek, Hilbig, Salt Flat and Zoboroski crudes.....$0.96
Van crude.....$0.93
Conroe.....$1.27

(Effective Dec. 3, 1938)

Flour Bluff.....$1.23

Oct. 12, '38, Magnolia met Humble in Darst Creek; posted $0.87 in Luling; $0.99 in Lytton Springs; $1.14 for Cleveland, and $1.02 in Hardin, both in Liberty county, Tex.

Oct. 12, '38, The Texas Co. met Humble in Darst Creek.

**Anahuac and Dickinson*

(Effective Dec. 3, 1938)

Below 20°	$0.74	30-30.9	$1.03
20-20.9	.77	31-31.9	1.05
21-21.9	.80	32-32.9	1.07
22-22.9	.83	33-33.9	1.09
23-23.9	.86	34-34.9	1.11
24-24.9	.89	35-35.9	1.13
25-25.9	.92	36-36.9	1.15
26-26.9	.95	37-37.9	1.17
27-27.9	.97	38-38.9	1.19
28-28.9	.99	39-39.9	1.21
29-29.9	1.01	40 & above	1.23

*Includes Cedar Point, Fairbanks, Gillock, Hull, Pierce Junction and Raccoon Bend (shallow sand).

Raccoon Bend (Deep sand crude) Tomball and Satsuma

(Effective Dec. 3, 1938)

22-22.9	$0.95	27-27.9	$1.05
23-23.9	.97	28-28.9	1.07
24-24.9	.99	29-29.9	1.09
25-25.9	1.01	30-30.9	1.11
26-26.9	1.03	31-31.9	1.13

(Continued on next page)

CRUDE OIL MARKETS

(Continued from preceding page)

32-32.9	$1.15	37-37.9	$1.25
33-33.9	1.17	38-38.9	1.27
34-34.9	1.19	39-39.9	1.29
35-35.9	1.21	40 & above	1.31
36-36.9	1.23		

Dec. 3, Magnolia met above price and gravity schedule in Tomball.

Posted by Humble

***Mirando**

(Effective Dec. 3, 1938)

Below 20°	$0.74	30-30.9	$1.03
20-20.9	.77	31-31.9	1.05
21-21.9	.80	32-32.9	1.07
22-22.9	.83	33-33.9	1.09
23-23.9	.86	34-34.9	1.11
24-24.9	.89	35-35.9	1.13
25-25.9	.92	36-36.9	1.15
26-26.9	.95	37-37.9	1.17
27-27.9	.97	38-38.9	1.19
28-28.9	.99	39-39.9	1.21
29-29.9	1.01	40 & above	1.23

*Includes Duval, Jim Hogg, Jim Wells, Webb and Zapata counties, Tex. and Heyser and Placedo crudes.

Oct. 12, '38, Texas Co. posted for Duval-Mirando, $0.77 for below 21, plus 3c differential to 26-26.9, $0.95; 27-27.9, $0.97; 28 & above, $0.99.

Dec. 3, Humble's Mirando schedule met by Magnolia.

LOUISIANA-ARKANSAS

Posted by Standard Oil Co. of Louisiana

(Effective Oct. 5, 1938)

	*N. La.-Ark.	†Columbia County, Ark.	‡South Louisiana
Below 21°	$0.73	$0.66	$0.74
21-21.9	for	for	.77
22-22.9	oil	oil	.80
23-23.9	Below	Below	.83
24-24.9	25°	25°	.86
25-25.9	$0.75	$0.68	.89
26-26.9	.77	.70	.92
27-27.9	.79	.72	.94
28-28.9	.81	.74	.96
29-29.9	.83	.76	.98
30-30.9	.85	.78	1.00
31-31.9	.87	.80	1.02
32-32.9	.89	.82	1.04
33-33.9	.91	.84	1.06
34-34.9	.93	.86	1.08
35-35.9	.95	.88	1.10
36-36.9	.97	.90	1.12
37-37.9	.99	.92	1.14
38-38.9	1.01	.94	1.16
39-39.9	1.03	.96	1.18
40 & above	1.05	.98	1.20

(Effective Oct. 5, 1938)

Smackover, Ark. $0.73

Posted by Arkansas Fuel Oil Corp.

(Effective Jan. 28, 1937)

Urania, La. $1.02

Posted by Continental Oil Co.

(Effective Oct. 11, 1938)

Tepetate and Ville Platte, La. $1.03

(Effective Jan. 1, 1939)

Abbeville, La.

Below 36	$0.92	38-38.9	$0.98
36-36.9	.94	39-39.9	1.00
37-37.9	.96	40 & above	1.02

Posted by Caddo Crude Oil Purchasing Corp.

(Effective April 19, 1939)

Allison area, Shreveport field $1.05

(Effective April 29, 1939)

Lisbon, N. La.

Below 34	$0.73	35 & above	$0.77
34-34.9	.75		

*Includes Bunkie, Caddo, Carterville, DeSoto, Homer, Haynesville, Rodessa, Sabine and Sarepta, in N. La.; El Dorado and Miller County, Ark. (latter is Ark. part of Rodessa field).

Note: S. O. Louisiana prices in all La.-Ark. fields, effective Oct. 5, 1938, are on 100% tank table basis.

†Includes Buckner, Magnolia, and Village pools.

‡Includes these fields: Baton Rouge, Bayou, Choctaw, Cheneyville, Darrow, Jeanerette, Lirette, N. Crowley and Roanoke.

Oct. 12, 1938, Magnolia Petroleum and The Texas Co. posted same gravity and price schedule as S. O. La. posts in N. La.-Ark. in these fields: Magnolia, in Bull Bayou, Cotton Valley, Haynesville, Pine Island and Rodessa, La., and Eldorado and Rainbow, Ark.; Texas Co. in N. La. Both also met S. O. La in Smackover. Texas Co. posted $1.24 for Garden Island, La. and $1.04 for Lafitte, La.

*GULF COASTAL FIELDS

Posted by Humble Oil & Refining Co.

†(Effective Oct. 11, 1938)

Below 20	$0.79	30-30.9	$1.08
20-20.9	.82	31-31.9	1.10
21-21.9	.85	32-32.9	1.12
22-22.9	.88	33-33.9	1.14
23-23.9	.91	34-34.9	1.16
24-24.9	.94	35-35.9	1.18
25-25.9	.97	36-36.9	1.20
26-26.9	1.00	37-37.9	1.22
27-27.9	1.02	38-38.9	1.24
28-28.9	1.04	39-39.9	1.26
29-29.9	1.06	40 & above	1.28

Polk County, Tex.

(Posted by Shell Oil Co., Inc.)

Livingston Area (Effective Oct. 11, '38) $1.10

Schwab Area (Effective Feb. 20, '39) 1.00

†Effective Dec. 3, 1938, gravities up to 45 & above discontinued in Refugio, Saxet, Greta, O'Connor-McFadden, Taft, Plymouth and Tom O'Connor fields.

*Humble's prices apply in these Texas fields: Amelia, Clear Lake, Goose Creek, Mykawa, Sugarland, Thompsons, Webster and West Columbia; also Refugio, Saxet, Greta, O'Connor-McFadden, Taft, Plymouth and Tom O'Connor fields.

Oct. 11, 1938, Stanolind posted in Clinton, Hastings, High Island, So. Houston, and Spindletop same prices as Humble in Texas Gulf Coast fields, except that Stanolind's lowest grade is below 21, at $0.82.

Oct. 12, 1938, The Texas Co. posted for Texas & La. Gulf Coast crude: $0.82 for below 21 plus 3c to 26-26.9, which is $1; from there on, 2c, to 34 & above, which is $1.16. In Refugio, same as other Gulf Coast, except highest gravity is 28 & above, $1.04.

Effective Oct. 11, 1938, Sinclair Prairie met Humble's Gulf Coast price & gravity schedule.

ROCKY MOUNTAIN FIELDS

Posted by Stanolind Oil & Gas Co.

(Effective Oct. 11, 1938)

Salt Creek, (except Tensleep crude), Midway and Dutton Creek, Wyo., same schedule as Stanolind posts in Oklahoma-Kansas, ranging from $0.86 to $1.10, which see under Mid-Continent crude on previous page.

Tensleep, Salt Creek field	$0.646
Iles, heavy	0.92
Elk Basin, light	0.90
Grass Creek, light	0.90
Frannie light	0.55
Grass Creek, heavy	0.40
Hamilton Dome, Wyo	0.35
Frannie heavy	0.42

Posted by Ohio Oil Co.

(Effective Oct. 11, 1938)

Elk Basin, Wyo	$0.90
Grass Creek, light	0.90
Rock Creek	1.00
Lance Creek	0.77
Dry Creek, Mont	0.92

(Effective May 1, 1938)

Grass Creek, heavy $0.50

(Effective Nov. 16, 1937)

Sunburst, Mont. $0.90

Posted by Continental Oil Co.

(Effective Oct. 11, 1938)

Cat Creek, Mont.	$1.10
Big Muddy, Wyo.	0.98
Lance Creek, Wyo.	0.77

CALIFORNIA, *Posted by Standard Oil of California*

All gravities above those quoted take highest price offered in the field. Prices effective Feb. 26, 1936, except Huntington Beach, Playa del Rey, Santa Fe Springs, Kern Front, Signal Hill (Long Beach) effective March 7, 1936; Elk Hills effective June 22, 1936; Lakeview Area, Aug. 19, 1936; El Segundo and Wilmington, Oct. 15, 1937; Greeley-Canal, July 9, 1938; Santa Maria Valley, by Union Oil, Oct. 15, 1938.

Gravity	Signal Hill (Long Beach) El Segundo †Wilmington	Seal Beach	Alamitos Heights	Huntington Beach	Inglewood	Playa del Rey	Olinda Brea Canon	Athens Rosecrans	Dominguez	Torrance	Richfield	Whittier East Coyote (La Habra)	Montebello	West Coyote Hills	Santa Fe Springs	‡Newhall and others	Mountain View	Elk Hills	Buena Vista Hills Midway-Sunset Lakeview Area	Greeley-Canal (Kern County)	Lost Hills	Coalinga	Wheeler Ridge	Santa Maria (Union Oil)
13-13.9	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	$0.63
14-14.9	$0.80	$0.79	$0.74	$0.78	$0.79	$0.80	$0.76	....	....	$0.80	$0.76	$0.76	$0.77	$0.78	....	$0.70	....	$0.70	$0.70	....	$0.70	$0.70	....	.65
15-15.9	.80	.79	.74	.78	.79	.80	.76	....	....	.80	.76	.76	.77	.78	....	.70	....	.70	.70	....	.70	.70	....	.68
16-16.9	.80	.79	.74	.78	.79	.80	.76	....	....	.80	.76	.76	.77	.78	....	.70	....	.70	.70	....	.70	.70	....	.70
17-17.9	.80	.79	.74	.78	.81	.80	.76	....	....	.80	.76	.76	.77	.78	....	.70	....	.70	.70	....	.70	.70	....	.70
18-18.9	.80	.79	.74	.78	.84	.80	.78	....	....	.82	.76	.76	.77	.78	....	.70	....	.70	.70	....	.70	.70	....	....
19-19.9	.82	.79	.74	.82	.87	.84	.81	....	....	.85	.76	.78	.77	.78	....	.70	.70	.74	.74	....	.74	.71	.70	....
20-20.9	.85	.79	.74	.85	.90	.88	.84	....	....	.88	.78	.82	.77	.80	....	....	.70	.78	.78	....	.78	.72	.70	....
21-21.9	.88	.79	.74	.89	.93	.93	.84	....	....	.91	.80	.85	.77	.84	.78	....	.73	.82	.82	....	.82	.74	.70	....
22-22.9	.92	.82	.74	.92	.96	.98	.92	....	....	.93	.84	.89	.79	.88	.78	....	.77	.87	.87	....	.86	.78	.72	....
23-23.9	.95	.86	.77	.96	.99	1.02	.96	.84	.79	.96	.88	.93	.82	.92	.78	....	.80	.92	.92	....	.90	.82	.76	....
24-24.9	.99	.91	.80	1.00	1.02	1.06	.99	.88	.81	.99	.91	.96	.85	.96	.82	....	.84	.97	.97	....	.94	.86	.79	....
25-25.9	1.03	.95	.82	1.03	1.05	1.11	1.03	.93	.83	1.02	.95	....	.89	.99	.86	....	.88	1.01	1.01	....	.98	.90	.83	....
26-26.9	1.06	1.00	.85	1.07	1.09	1.16	1.06	.98	.86	1.05	.98	....	.92	1.03	.90	....	.91	1.06	1.06	....	1.02	....	....	....
27-27.9	1.10	1.05	.88	1.11	1.12	....	1.10	1.03	.88	....	1.02	....	.96	1.06	.95	....	.95	1.10	1.10	$0.91	1.06	....	....	....
28-28.9	1.14	1.10	.90	1.14	1.15	....	1.14	1.07	.90	....	1.06	....	.99	1.10	.99	....	.99	1.15	1.15	.94	1.10	....	....	....
29-29.9	1.17	1.15	.93	1.18	1.18		1.17	1.12	.93	....	1.09	....	1.03	1.14	1.03	....	1.02	1.20	1.20	.98	1.14	....	....	....
30-30.9	1.21	1.19	.95	1.22	1.21		1.21	1.17	.95	....	....	....	1.07	1.17	1.08	....	1.06	1.25	1.25	1.02	1.18	....	....	....
31-31.9				....	1.24		1.24	1.22	.97	....	....	....	1.11	1.21	1.12	....	1.09	1.29	1.29	1.06				
32-32.9	*Ellwood Terrace			....	1.27		1.27	1.27	1.00	....	....	....	1.14	1.25	1.16	....	1.13	1.34	1.34	1.09	Kettleman Hills			
33-33.9	....	1.28	....	....	....		....	1.32	....	....	....	....	1.18	1.28	1.20	....	1.17	1.38	1.38	1.13	....	1.19	....	....
34-34.9	....	1.32	....	....	....		....	1.37	....	....	....	....	1.22	1.32	1.25	....	1.20	....	....	1.17	....	1.23	....	....
35-35.9	....	1.35	....	....	....		....	1.42	....	....	....	....	1.25	....	1.29	....	....	....	....	1.20	....	1.27	....	....
36-36.9	....	1.39	....	....	....		....	1.46	....	....	....	....	1.29	....	1.33	....	....	....	....	1.24	....	1.31	....	....
37-37.9	....	1.43	....	....	....		....	1.51	....	....	....	....	1.32	....	1.37	....	....	....	....	1.28	....	1.35	....	....
38-38.9	....	....	....	....	....		....	1.56	....	....	....	....	1.36	....	1.42	....	....	....	....	1.31	....	1.39	....	....
39-39.9	....	....	....	....	....		....	1.61	....	....	....	....	1.40	....	....	....	....	....	....	1.35	....	1.43	....	....
40-40.9	....	....	....	....	....	F.O.B. Standard Pipe Line	....	1.66	....	....	....	....	1.43	....	....	....	....	....	....	1.39	....	....	....	....
41-41.9	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1.43	....	....	....	....
42-42.9	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1.46	....	....	....	....
43-43.9	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1.50	....	....	....	....
44-44.9	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1.54	....	....	....	....
45-45.9	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1.57	....	....	....	....
46-46.9	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1.61	....	....	....	....
47-47.9	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1.65	....	....	....	....
48-48.9	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1.68	....	....	....	....

*F. o. b. ship.

‡Also McKittrick, Kern River. Kern Front and Round Mountain $0.70 thru 19.9 gravity; no higher gravity quoted.

†Wilmington prices differ on gravities below 18.9. Prices are: 14-16.9, $0.75; 17-17.9, $0.77; and 18-18.9, $0.79; rest of schedule same as Signal Hill.

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Third Atlantic Rfg. Tanker Completed

PHILADELPHIA—The third of Atlantic Refining Co.'s new 18,100-ton, welded tankers will be launched at Sun Shipbuilding and Dry Dock Co. yards at Chester, July 29. It will be christened by Mrs. E. J. Henry, wife of Vice President Henry, for whom the vessel will be named.

Like her sister ships J. W. Van Dyke and the Robert H. Colley, both of which were commissioned in 1938, the E. J. Henry has an overall length of 541 feet, 5 inches and a beam of 70 feet.

Sales Meetings Held On Fuel, Diesel Oils

CHICAGO—A series of 15 meetings on furnace and diesel oils has been held by Sinclair Refining Co., in Illinois, Indiana, Michigan, Ohio, and Wisconsin.

The meetings were for a better education of the company's sales personnel and a greater understanding between fuel oil distributors and equipment manufacturers. Modern oil burning equipment and accessories were on exhibit at the meetings and were demonstrated in the talks on the correct uses of fuel oil "From Oil Tank to Chimney."

CLASSIFIED

Positions Wanted

LUBRICATING OIL SALESMAN. Thirteen years experience. Following in Northern Ohio. Will travel all or part of state. Now employed. Looking for direct connection with a Pennsylvania refinery. Best references. Box 142.

WANTED—Position as salesman or sales manager wholesale division. Nine years experience service station development. Excellent business background. Best references. Successful record. Good reasons for desiring change. Write W. J. Ritchey, 9 Standish St., Frostburg, Md.

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OIL TERMINAL

Desirable water front. Bulk plant. Philadelphia, Pa. Storage tanks, loading platforms, meters, pumps, ready for use. Long lease. Reasonable rental.

Address Box 7,
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IF YOUR TANK CARS are short, know how much. Jandreau Gauger shows shortage in gallons. Instantly. Simple to operate. Tank car buyers and agents should know. Some slightly used. $9.25 prepaid Bonded Service Warehouse, 223 Spring St., S. W., Atlanta, Ga.

ATTENTION, OWNER WISHES TO RETIRE. Offers modern bulk plant complete with sufficient contract business to guarantee handsome future profits. Located in a prosperous city of 40,000 people in northeastern Wisconsin. First $4000 takes it. A real future for someone. Write Box 141, National Petroleum News.

EQUIPMENT FOR SALE

7 Sharples Super-Centrifuges Type M-1295 Q. 15000 RPM.

7 Ditto, Type 5K-3, 3600 RPM

All complete with motors and in first-class condition.

Associated Metals & Minerals Corp.
40 Rector Street, New York, N. Y.

For Sale or Rent

OIL REFINERY FOR SALE OR RENT

MODERN BRIGHT STOCK PLANT, in excellent condition, located in Pennsylvania. Complete, with all latest equipment, incl. Sharples supercentrifuges, refrigerators, and Herreshoff furnaces. Ready for immediate operation. Also ideally suited for chemical purposes.

Address Box 143, National Petroleum News

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WANTED

Good outside salesman, college graduate preferred. Must be thoroughly experienced in salesmanship and familiar with the oil industry. Give full details in first letter. Confidential.

Address Box 137
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"Position Wanted"—5 cents a word. Minimum charge $1.00.

Advertisements set in special type or with border—$4.00 per column inch.

Copy must reach us not later than Saturday preceding date of issue.

All advertisements carried on this page are payable in advance.

"STRICTLY PERSONAL"

James P. Dunnigan has been elected president of the reorganized Producers Refg. Co., West Branch, Mich. Mr. Dunnigan was formerly general manager of the plant. Other officers elected at a recent meeting are **D. E. Tolfree,** West Branch, vice president; **Phillip D. Dexter,** Detroit attorney, secretary; **Clyde W. Cressman,** Detroit, treasurer.

* * *

R. H. Robinson, formerly superintendent of operations in the Boston division of Gulf Refining Co., has been appointed assistant division manager in charge of operations.

* * *

Parker L. Melvin, of Bradford, Pa., of Towne-Melvin Oil Co., has been appointed Oil Observer for the state by Pennsylvania's governor, Arthur H. James. Mr. Melvin will represent Pennsylvania at meetings of the Interstate Compact Commission, although he will not be entitled to vote because Pennsylvania is not a member of the compact.

* * *

M. H. Duffield, former assistant manager of the Chicago division of the Mid-Continent Petroleum Corp. has been transferred to the Terre Haute, Ind., office of the company as manager of tank car sales department. **R. N. Carter,** special sales representative at Chicago, will suceed Mr. Duffield.

* * *

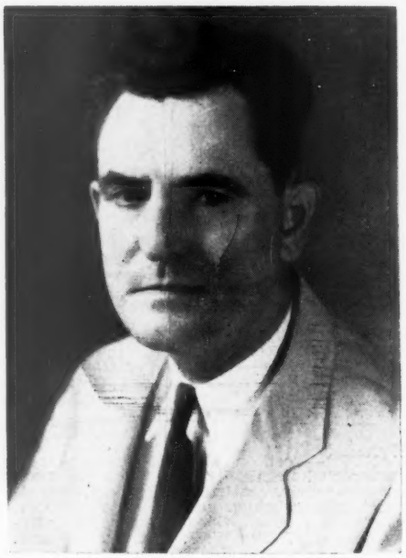
Bryan S. Reid, general manager of the Chicago division of Socony-Vacuum Oil Co., accompanied by Mrs. Reid, Joan and Bryan S. Reid, Jr., are on vacation in Honolulu. They sailed in mid-July from San Francisco and expect to return in late August.

* * *

T. C. Jones of Delaware Gas Co. was elected president of the Ohio Gas and Oil Men's Association by the board of directors at its recent meeting in Columbus. **W. R. Pringle** of East Ohio Gas Co. was named vice-president and **Frank B. Mauller** was re-elected secretary-treasurer. **W. G. Rogers** of the East Ohio Gas Co. was elected to the board of directors of the association filling the vacancy caused by the resignation of **J. J. McMahon.** The executive committee is composed of Mr. Jones, Pringle, and **L. A. Seyffert** of the Ohio Fuel Gas Co.

* * *

Herman T. Schneebeli has been appointed commission distributor for Gulf Refining Co. at Williamsport, Pa. Mr. Schneebeli formerly was in charge of tire, tube and accessory sales in Gulf's Philadelphia division.



George Reid

George Reid, executive secretary of the newly-formed Gulf Coast Refiners Ass'n. has been associated with the oil industry for the past 25 years. From 1914 to 1924 he was with independent refineries in North Texas and Oklahoma, then he engaged in consulting engineering work and free lance writing in California, joining Gulf Publishing Co. in 1926, he was made editor of Refiner and Natural Gasoline Manufacturer in 1934. A native of Illinois, Mr. Reid moved to Arkansas where he attended the University of Arkansas, majoring in chemical engineering.

The Gulf Coast Refiners' Ass'n. formed to assemble and disseminate statistical information, is headed by **D. W. Hovey,** vice president and general manager, Republic Oil Refining Co. **Cornelius Kroll,** president of Southport Petroleum Corp. and **G. L. Rowsey,** president of Taylor Refining Co., are vice presidents, and **L. F. Rothermel,** president of Maritime Oil Co., is treasurer.

* * *

Thomas J. Harkins, research engineer for Pennzoil Co., succeeds **G. O. Ebrey,** who resigned as chief chemist of the company to join the staff of the Mellon Institute at Pittsburgh.

* * *

All officers of the Pennsylvania Grade Crude Oil Assn. were re-elected at the directors' meeting at Warren, Pa., last week, according to **Wes W. Dunlap,** publicity director of the organization. Officers are: W. F. Clinger, Clinger Oil & Gas Co., Tidioute, Pa., president; P. L. Melvin, Towne-Melvin Oil Co., Bradford, vice-president; Otto Walchli, Richardson Petroleum Co., Wellsville, N. Y., vice-president; J. A. Beck, Pennsylvania Refining Co., Butler, recording secretary; S. Messer, Quaker State Oil Refining Corp., Oil City, treasurer; W. R. Reitz, Quaker State Oil Refining Corp., Oil City, assistant treasurer; Fayette B. Dow, Dow and Lohnes, Washington, D. C., general counsel; J. E. Moorhead, executive secretary; and S. A. Hartwell, Jr., assistant secretary.

S. F. Pratt was re-appointed European manager.

* * *

John Stumpf is now in the Centralia office of Apex Oil Co., St. Louis, which is the sales agency for Centralia Refining Co. and Basin Oil Refining Co. In NPN of July 12, Mr. Stumpf was incorrectly identified as sales manager for Centralia Refining Co.

* * *

Chester F. Pettit, has recently been appointed as field representative in the Division of Gasoline Tax Collection, according to an announcement by Harry F. Kelly, Secretary of the State. Territory assigned to Mr. Pettit includes Isabella, Gratiot, Midland, Clare, Gladwin and Roscommon counties, which comprise Zone Seven of the Gasoline Tax Division.

* * *

Ben H. Ziehler of Dayton, Ohio, president of Producers Oil Co. is recuperating from a recent surgical operation.

* * *

Franklin F. Devine, for the past five years assistant general agent for Mexican Gulf Oil Co., has been appointed general agent at Tampico, succeeding **James W. Bradbury** who has been transferred to South America.

* * *

A. L. Derby was re-elected chairman of the board of Derby Oil Co. at the annual meeting of the board of directors here last week. **Carl Fisher** was renamed president and **H. E. Zoller** executive vice president and general manager.

* * *

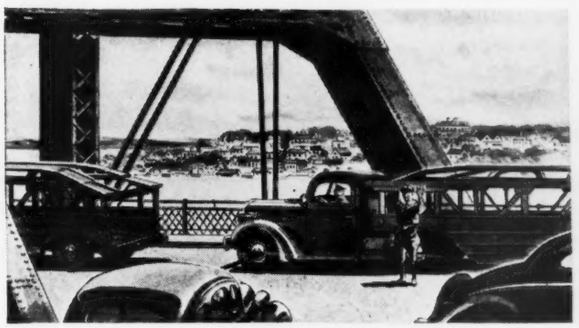
M. H. "Heiny" Hindman of Butler, Pa., Pennsylvania Refining Co., was in Cleveland on business last week. "Heiny" expects some of his Cleveland and Oil City friends to join him this week for a golf session at Butler Country Club. Included in the tourney will be **M. R. "Miles" Wiseman** and **"Pat" Patterson** both of Allied Oil Co., Cleveland, and **"Chuck" Rennacker,** Oil City, of James B. Berry Sons' Co.

Case #487

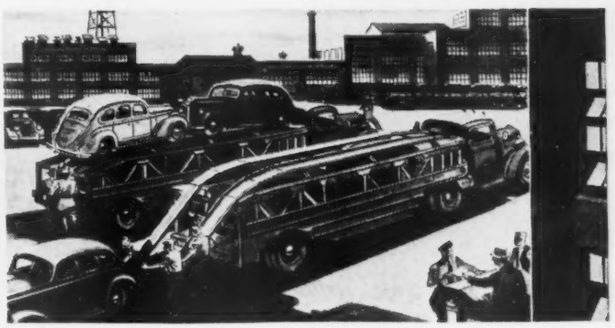
The Case of the "Pick-a-Back" Twins

—a true story from the files on Gulfpride, the motor oil that cuts consumption between drains

1. **"Maybe your Gulfpride Oil** will save me money," said a Memphis, Tennessee, car dealer, "but you'll have to do better than claim it. You'll have to *prove* it. And we'll use these two 'pick-a-back' trucks as guinea pigs in a little experiment."



2. **So, off to far-away Detroit** rumbled the pick-a-back twins. In the crankcase of one was the car dealer's regular oil; in the other was Gulfpride. So far it wasn't too tough on either oil. But what about the trip back, with each truck 11,740 pounds heavier?



3. **Detroit.** Each truck shouldered four shiny, new cars on its back — same make, same model, same weight. Then, driving at identical speed, they rumbled off for Memphis, 800 miles away. With both oils taking an equal amount of heavy punishment, could either show a clear-cut superiority over the other?

4. **Back in Memphis** with a thrifty moral for every driver! For while one pick-a-back twin had consumed *28 quarts of the competitive oil*, the other had used only *12 quarts of Gulfpride*—less than half as much! Said the delighted car dealer, "We'll use Gulfpride in all our trucks and recommend it to all our customers."

Take a tip from this Memphis experiment. Fill up with Gulfpride, keep a record of your oil consumption, and see how much *less oil* you add between drains. Notice, too, how much less you spend for engine repairs.

For you can take this as a fact: *There is no other oil like Gulfpride.* Gulfpride is made from 100% pure Pennsylvania crude by Gulf's patented and exclusive Alchlor process—a process which removes up to 20% *more* waste.

SO DRIVE IN at the Sign of the Orange Disc. Say, "Fill her up with Gulfpride!"—and you'll get the grandest lubrication money can buy! Gulf Oil Corporation—Gulf Refining Company, Pittsburgh, Pa.

Gulfpride Oil GULF

100% Pure Pennsylvania · at Dealers' in Sealed Cans Only

JOBBERS AND COMPOUNDERS: Gulfpride Oil is typical of the quality found in Gulf Lubricants

Benedum Honored on His 70th Birthday

Standing before a miniature oil derrick, Congressman Jennings Randolph, W. Va., left, presents birthday greetings from President Roosevelt to Michael L. Benedum. Next is E. T. Weir, steel man, and Justice James B. Drew, of the Pennsylvania supreme court

CAPTAINS of industry from all over the east gathered with political and labor leaders July 17 at the Duquesne Club, Pittsburgh, to honor Michael L. Benedum, oil man, on his 70th birthday. Among the over 200 congratulatory messages was a "Dear Mike" letter from President Roosevelt. Telegrams were also received from Former President Hoover and Alfred M. Landon, Republican presidential nominee in 1936. Rubbing elbows in the crowd of 320 at the birthday party were such personages as E. T. Weir, steel master, and John L. Lewis, C.I.O. chieftain.

Starting as an independent producer in the 1880's at Sistersville, W. Va., Mr. Benedum prospected for oil –and found it—in many corners of the world. Teaming with J. C. Trees in 1900, the Benedum-Trees found so many fields that they became known as "America's No. 1 Wildcatters." But they have held on to much of their production properties so that today they are among the country's largest independent producers. They are also interested in refining and marketing.

A life-long Democrat, Mr. Benedum became active in politics in 1924 when John W. Davis, from his home county in West Virginia, ran for President. During NRA days, Mr. Benedum served as a government representative on the Planning and Co-ordination Committee, administering the oil code.